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Item 2 of the provisional agenda*

Adoption of the agenda and other organizational matters

Provisional agenda and annotations

1. Election of officers.
2. Adoption of the agenda and other organizational matters.
3. Items for discussion and decision:
 - (a) Programme review: education statistics;
 - (b) Population and housing censuses;
 - (c) Disability measurement;
 - (d) Information and communication technology (ICT) statistics;
 - (e) Agricultural statistics;
 - (f) National accounts;
 - (g) Integrated economic statistics;
 - (h) Environmental accounting;
 - (i) International economic and social classifications;
 - (j) Management issues in national statistical offices: access to microdata;
 - (k) Development indicators;
 - (l) Statistical capacity-building;
 - (m) International Comparison Programme.
4. Items for information:
 - (a) Migration statistics;
 - (b) Health statistics;

* E/CN.3/2007/1.



- (c) Industrial statistics;
 - (d) Distributive-trade statistics;
 - (e) Energy statistics;
 - (f) Finance statistics;
 - (g) Price statistics;
 - (h) Coordination and integration of statistical programmes;
 - (i) Common open standards for the exchange and sharing of data and metadata;
 - (j) Follow-up to Economic and Social Council policy decisions.
5. Programme questions (United Nations Statistics Division).
 6. Provisional agenda and dates for the thirty-ninth session of the Commission.
 7. Report of the Commission on its thirty-eighth session.

Annotations

1. Election of officers

In accordance with rule 15 of the rules of procedure of the functional commissions of the Economic and Social Council and past practices, the Statistical Commission, at the commencement of its first meeting of a regular session, shall elect, from among the representatives of its members, a Chairman, three Vice-Chairmen and a Rapporteur (the Bureau).

The Bureau serves for two years, as far as possible. This is achieved by electing the Bureau for a period of one year and re-electing those members of the Bureau who continue to be representatives to the Commission at the following session. The Bureau is elected based on the principle of equitable geographical distribution — a member of the Bureau is elected from each of the regions represented on the Commission.

2. Adoption of the agenda and other organizational matters

The items on the provisional agenda and the corresponding documentation were proposed by the Commission at its thirty-seventh session (New York, 7-10 March 2006)¹ and were adopted by the Economic and Social Council in its decision 2006/232. The Bureau of the Commission has subsequently approved some changes. The proposed draft organization of work and a note on the state of preparation of documentation for the session are before the Commission. The Commission may wish to adopt the agenda and organization of work for its thirty-eighth session.

Documentation

Provisional agenda and annotations (E/CN.3/2007/1)

¹ See *Official Records of the Economic and Social Council, 2006, Supplement No. 4 (E/2006/24)*, chap. I, sect. B, draft decision.

Note by the Secretariat on the organization of the work of the session (E/CN.3/2007/L.1)

Note by the Secretariat on the state of preparation of documentation for the session (E/CN.3/2007/CRP.1)

3. Items for discussion and decision

(a) Programme review: education statistics

The Statistical Commission will have before it a report prepared by Statistics Canada, containing a programme review of education statistics. The report presents the current situation, analyses the challenges and provides specific recommendations. The Commission may wish to express its views on the findings, conclusions and recommendations for future work in this area.

Documentation

Note by the Secretary-General transmitting the report of the programme reviewer on education statistics (E/CN.3/2007/2)

(b) Population and housing censuses

The Statistical Commission will have before it the report of the Secretary-General on population and housing censuses. The report summarizes activities completed in response to actions taken by the Commission at its thirty-sixth session with regard to the implementation of the 2010 World Programme on Population and Housing Censuses, including the revision of the United Nations *Principles and Recommendations for Population and Housing Censuses*. The Commission may wish to express its views on the activities and also adopt the revised *Principles and Recommendations*.

Documentation

Report of the Secretary-General (E/CN.3/2007/3)

(c) Disability measurement

The Commission will have before it the report of the Washington Group on Disability Statistics. The report outlines the work accomplished by the Washington Group in the design of disability questions for censuses and outlines future activities, including the development of disability questions for surveys. The Commission is requested to express its views on the findings, conclusions and recommendations for future work of the Washington Group. In particular, the Washington Group is seeking the Commission's approval of its workplan for 2007.

Documentation

Note by the Secretary-General transmitting the report of the Washington Group on Disability Statistics (E/CN.3/2007/4)

(d) Information and communication technology (ICT) statistics

The Commission will have before it a report prepared by the Partnership on Measuring Information and Communication Technologies for Development, which

presents the list of core ICT indicators agreed upon at the 2005 global meeting on measuring the information society and recommended by the 11 member organizations of the Partnership as a basis for the collection of comparable ICT statistics internationally. The report also provides a short update of the work carried out by the Partnership and its future plans. The Commission may wish to comment on the work undertaken and the future plans of the partnership, and endorse the list of core ICT indicators presented.

Documentation

Note by the Secretary-General transmitting the report of the Partnership on Measuring Information and Communication Technologies for Development (E/CN.3/2007/5)

(e) Agricultural statistics

The Commission will have before it a report prepared by the Food and Agriculture Organization of the United Nations (FAO), providing an update on the recent developments in agricultural statistics and future challenges and plans. The report describes the basic features of the modernized FAOSTAT and its new country version CountrySTAT, the World Programme for the Census of Agriculture 2010 and work on agricultural classifications, as well as efforts to improve the coverage, quality and exchange of agricultural statistics. The Commission may wish to review the developments and express its views on the status of agricultural statistics and provide guidance on future directions and activities.

Documentation

Note by the Secretary-General transmitting the report of the Food and Agriculture Organization of the United Nations (E/CN.3/2007/6)

(f) National accounts

The Commission will have before it the report of the Intersecretariat Working Group on National Accounts. The report describes progress in the work completed in the updating of the System of National Accounts, 1993 (1993 SNA). The recommendations on the issues for updating will be presented to the Commission for consideration in a separate background document. The report includes the plan towards the completion of the draft 1993 SNA Rev.1. The Commission is requested to review the work on the update and express its view on the recommendations for the updating of the 1993 SNA.

Documentation

Note by the Secretary-General transmitting the report of the Intersecretariat Working Group on National Accounts (E/CN.3/2007/7)

(g) Integrated economic statistics

The Commission will have before it the report of the Secretary-General on integrated economic statistics. It contains an update on the work initiated by the Friends of the Chair, which was established at the request of the Statistical

Commission at its thirty-seventh session. The Commission may wish to take note of the report.

Documentation

Report of the Secretary-General (E/CN.3/2007/8)

(h) Environmental accounting

The Commission will have before it the report of the Committee of Experts on Environmental-Economic Accounting. The report describes the progress of work of the Committee, in particular concerning the refinement of working relationships with other groups responsible for the development of environment, energy and related statistics. It outlines the objectives, governance and reporting structure of the London Group on Environmental Accounting during the revision process of the *System of Integrated Environmental and Economic Accounting 2003* (SEEA-2003). The report presents the draft *System of Environmental and Economic Accounting for Water* (SEEA-W), as recommended by the Committee and the user community. The Commission may wish to express its views on the work of the Committee.

Documentation

Note by the Secretary-General transmitting the report of the United Nations Committee of Experts on Environmental-Economic Accounting (E/CN.3/2007/9)

(i) International economic and social classifications

The Commission will have before it the report of the Secretary-General, providing updated information on the work on international classifications and focusing in particular on the implementation of the International Standard Industrial Classification of All Economic Activities (ISIC) and the Central Product Classification (CPC). The Commission may wish to comment on the outlined implementation plan.

The Commission will also have before it a report prepared by the International Labour Office (ILO) providing information on recent developments and progress in updating the International Standard Classification of Occupations (ISCO). The report describes the status of the project and ILO plans for completion and adoption of the updated ISCO. A complete draft classification structure for the updated ISCO will be available as a background document. The Commission may wish to comment on the draft and on the ILO plans to complete the work.

Documentation

Report of the Secretary-General (E/CN.3/2007/10)

Note by the Secretary-General transmitting the report of the International Labour Office (E/CN.3/2007/11)

(j) Management issues in national statistical offices: access to microdata

The Commission will have before it a report prepared by Australia, drawn from the work of the Task Force on Confidentiality and Microdata, constituted by the Conference of European Statisticians. The report reviews some standard ways in

which microdata are currently made available to national and international users, and outlines procedures for statistical offices to safeguard the confidentiality of individuals represented in microdata access. It also reports on the role that some international and research institutions are playing as "data depositories" for some developing country national statistical offices. The Commission may wish to express its view on the guidelines for microdata access.

Documentation

Note by the Secretary-General transmitting the report of the Australian Bureau of Statistics (E/CN.3/2007/12)

(k) Development indicators

The Commission will have before it a report of the Secretary-General describing the work of the Inter-Agency Expert Group on Millennium Development Goals Indicators in 2006 in the following areas: improvement of the coverage, transparency and reporting on all indicators as presented in the database on all Millennium Development Goals; review of methodologies related to the agreed indicators; coordination of data collection at the global level; coordination and support to countries in the compilation and analysis of indicators at the national level; preparation of the yearly analysis and reports on progress towards the Millennium Development Goals. The Commission may wish to comment on progress made by the Expert Group and future directions of its work.

Documentation

Report of the Secretary-General (E/CN.3/2007/13)

(l) Statistical capacity-building

This report is submitted to the Commission in accordance with its request at its thirty-seventh session to report on the implementation of the resolution adopted by the Economic and Social Council in July 2006, on strengthening statistical capacity. The report provides an overview of the work undertaken by the United Nations Statistics Division and by the Inter-Agency Expert Group on Millennium Development Goals Indicators in 2006 to support national efforts in building and strengthening national statistical capacity. The Commission may wish to comment on the report.

Documentation

Report of the Secretary-General (E/CN.3/2007/14)

(m) International Comparison Programme

The Commission will have before it a report prepared by the International Comparison Programme Global Office of the World Bank on progress towards the completion of the 2005 round and the publication of the regional and global results. The report also includes a summary of results contributing to capacity-building for the International Comparison Programme and a proposal for a review of lessons learned from this round. The Commission may wish to review progress and provide direction on the continuation of the Programme.

Documentation

Note by the Secretary-General transmitting the report of the World Bank (E/CN.3/2007/15)

4. Items for information**(a) Migration statistics**

The Commission will have before it, for information, the report of the Secretary-General, presenting the United Nations Statistics Division activities on international migration. The report summarizes the main conclusions and recommendations of the Expert Group Meeting on the theme "Measuring international migration: concepts and methods", held in New York, from 4 to 7 December 2006. It proposes major activities to be undertaken as a follow-up to the Expert Group meeting. The Commission may wish to take note of the report.

Documentation

Report of the Secretary-General (E/CN.3/2007/16)

(b) Health statistics

The Commission will have before it, for information, a report of the Intersecretariat Working Group on Health Statistics that addresses the concerns of the Commission expressed at its thirty-seventh session and describes progress made by the Working Group along those lines in setting priorities and defining a workplan for the group. The Commission may wish to take note of the report.

Documentation

Note by the Secretary-General transmitting the report of the Intersecretariat Working Group on Health Statistics (E/CN.3/2007/17)

(c) Industrial statistics

The Commission will have before it, for information, the report of the Secretary-General on industrial statistics, further outlining a proposed work programme on industrial statistics. The Commission is requested to take note of the report.

Documentation

Report of the Secretary-General (E/CN.3/2007/18)

(d) Distributive-trade statistics

The Commission will have before it, for information, the report of the Secretary-General that describes the work progress on distributive-trade statistics, including the preparation of the revised provisional draft of the international recommendations on distributive-trade statistics, building a worldwide network of country experts in the areas of statistics, collection and analysis of good practices in the compilation of these statistics. The Commission may wish to take note of the report.

Documentation

Report of the Secretary-General (E/CN.3/2007/19)

(e) Energy statistics

The Commission will have before it, for information, the report of the Oslo Group on Energy Statistics on its first meeting. The report also summarizes the work of the Group since its first meeting. The Commission is invited to take note of the report. The Commission will also have before it, for information, the report of the Intersecretariat Working Group on Energy Statistics describing the work in progress in the area of energy statistics. The Commission may wish to take note of the report.

Documentation

Note by the Secretary-General transmitting the report of the Oslo Group on Energy Statistics (E/CN.3/2007/20)

Note by the Secretary-General transmitting the report of the Intersecretariat Working Group on Energy Statistics (E/CN.3/2007/21)

(f) Finance statistics

The Commission will have before it, for information, the report of the International Monetary Fund, summarizing recent developments and planned activities in the field of finance statistics. The Commission is requested to take note of the report.

Documentation

Note by the Secretary-General transmitting the report of the International Monetary Fund (E/CN.3/2007/22)

(g) Price statistics

The Commission will have before it, for information, the report of the Intersecretariat Working Group on Price Statistics covering the development of the Export and Import Price Index Manual and the future work of the Working Group. The Commission may wish to take note of the report.

Documentation

Note by the Secretary-General transmitting the report of the Intersecretariat Working Group on Price Statistics (E/CN.3/2007/23)

(h) Coordination and integration of statistical programmes

The Commission will have before it, for information, a report that summarizes the main conclusions of the fifth and sixth meetings of the Committee for the Coordination of Statistical Activities, held in New York, on 6 March 2006, and in Montreal, from 4 to 5 September 2006, respectively. The Commission may wish to take into account, in its discussions under relevant agenda items, the views expressed by the Committee. The Commission may wish to take note of the report.

The Commission will have before it a report, for information, prepared by the Partnership in Statistics for Development in the Twenty-first Century. The report outlines the efforts by the Partnership in promoting the better use of better statistics as a central part of the enabling environment for development progress, particularly through support to countries in the design, implementation and monitoring of national strategies for the development of statistics, through advocacy and by

encouraging donor collaboration in statistical support programmes. The Commission may wish to take note of the report.

Documentation

Report of the Secretary-General on the work of the Committee for the Coordination of Statistical Activities (E/CN.3/2007/24)

Note by the Secretary-General transmitting the report of the Steering Committee on the Partnership in Statistics for Development in the Twenty-first Century (E/CN.3/2007/25)

(i) Common open standards for the exchange and sharing of data and metadata

The Commission will have before it a report, for information, on results achieved by seven international organizations involved in an initiative to foster standards on Statistical Data and Metadata Exchange (SDMX). The SDMX sponsoring institutions include the Bank for International Settlements, the European Central Bank, the Statistical Office of the European Communities, the International Monetary Fund, the Organization for Economic Cooperation and Development, the United Nations Statistics Division and the World Bank. The SDMX initiative has been reporting to the Statistical Commission since its thirty-third session in March 2002, and this report reviews recent developments in standards, guidelines and implementations. The Commission may wish to take note of the report.

Documentation

Note by the Secretary-General transmitting the report of the Task Force to Establish Standards on Data and Metadata Exchange (E/CN.3/2007/26)

(j) Follow-up to Economic and Social Council policy decisions

This item was placed on the agenda by the Commission at the request of the Economic and Social Council in its resolution 1999/51 with a view to encouraging a closer relationship between the work of the Commission and of the Council. The Commission will have before it, for information, a note by the Secretary-General containing extracts from Council resolutions, decisions and agreed conclusions that are relevant to the work of the Commission and the actions taken or planned by the Commission.

Documentation

Note by the Secretary-General on policy decisions of the Economic and Social Council that are relevant to the work of the Commission (E/CN.3/2007/27)

5. Programme questions (United Nations Statistics Division)

The Commission will receive an oral report from the Director of the United Nations Statistics Division concerning current activities, plans and priorities. It will also have before it the proposed programme of work of the Statistics Division for the biennium 2008-2009. The Commission is invited to approve the changes to the work programme for 2007 and to comment on the proposed programme for 2008-2009.

Documentation

Note by the Secretariat containing the proposed programme of work of the Statistics Division for the biennium 2008-2009 (E/CN.3/2007/28)

6. Provisional agenda and dates for the thirty-ninth session of the Commission

In accordance with rule 9 of the rules of procedure, the Commission will have before it the draft provisional agenda for its thirty-ninth session, together with an indication of the documents to be submitted under each item and the legislative authority for their preparation. The Commission will also have before it a proposal for the dates of the session. In addition, in accordance with a request of the Council (see Council resolution 1999/51), the Commission will have before it a draft multi-year programme of work for 2007-2010. The Commission may wish to approve the date, provisional agenda and documentation for its thirty-ninth session, as well as to approve the multi-year programme.

Documentation

Note by the Secretariat containing the draft provisional agenda for the thirty-ninth session of the Commission (E/CN.3/2007/CRP.2)

Note by the Secretariat on the draft multi-year programme of work of the Commission (E/CN.3/2007/29)

7. Report of the Commission on its thirty-eighth session

The Commission may wish to adopt the report on its thirty-eighth session, which will be submitted to the Council.

Documentation

Draft report of the Commission on its thirty-eighth session (E/CN.3/2007/L. __)



Economic and Social Council

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Statistical Commission

Thirty-eighth session

27 February-2 March 2007

Item 3 (a) of the provisional agenda*

**Items for discussion and decision: programme review:
education statistics**

Report of Statistics Canada on education statistics

Note by the Secretary-General

In accordance with a request of the Statistical Commission at its thirty-seventh session,** the Secretary-General has the honour to transmit the report of Statistics Canada on education statistics. The Commission is invited to express its views on the findings, conclusions and recommendations for future work in this area.

* E/CN.3/2007/1.

** See *Official Records of the Economic and Social Council, 2006, Supplement No. 4 (E/2006/24)*, chap. I.B.



Report of Statistics Canada on education statistics

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I. Mandate and approach

1. In December 2005 the United Nations Statistics Division asked Statistics Canada to undertake a review of educational statistics. This was to be the next in a series that includes service statistics (Australia, 2003) (E/CN.3/2003/12), social statistics (United Nations Statistics Division, 2004) (E/CN.3/2004/2), energy statistics (Norway, 2005) (E/CN.3/2005/3), and industrial statistics (Japan, 2006) (E/CN.3/2006/3). The very broad terms of reference are reflected in the questions that were asked: Are international agencies doing the right thing? Are there conceptual, methodological, definitional or dissemination issues that cause problems for users either in collection or use of the data? Are manuals and reference materials current? Are there comparability concerns? Could we comment on future directions? Is the world doing a good job in support of developing countries? The Statistics Division expressed the hope that the review would give direction on how an area of statistics should be further developed.

2. To deal with an international review of a field as broad as education, the reviewer leaned heavily on websites, e-mail exchanges, and secondary sources. The review has made no concerted attempt to look at education data from fields such as labour force, health, agriculture, and family statistics and at agencies such as ILO.

3. The review began with the same fundamental questions that need to be addressed at the beginning of any statistical programme: "what" is to be measured and "why". Once these policy and philosophical questions have been answered one can consider the "how" questions which involve basic processes of any statistical cycle from data standards through collection, quality, analysis and information development, storage, and dissemination, to user support. User support applies to each stage and includes statistical capacity-building, a fundamental consideration in an international review.

4. Given the breadth of the brief, and given that examinations of technical issues are available elsewhere, the review set out to identify major issues. Background material dealing with basic concepts, sources of educational data, and agencies and initiatives are presented in appendices.

5. Questions and issues appear in italics. Although suggestions are implicit in much of the report, major recommendations are provided in the final section dealing with conclusions and recommendations. Abbreviations used in the text are listed in annex IV.

II. Challenges

A. What gets measured — philosophy and goals

6. Ideally, a statistical programme is guided by a framework that can be related to goals that provide a clear understanding of what is to be measured and that have a philosophical basis. A framework highlights key factors affecting the subject and their relationships. Most importantly, a framework makes it possible to systematically assess whether the most important elements are being measured. Internationally in education, there is no single framework and the goals are

somewhat limited and may not be completely consistent with the international commissions that have provided a philosophical basis.

7. International philosophy is reflected in two major reports by UNESCO. Edgar Faure and Jacques Delors, respectively, chaired the commissions that prepared *Learning to be: the world of education today and tomorrow* in 1972, and *Learning: the treasure within* in 1998.

8. *Given the prominence of Learning to be and Learning: the treasure within, the goals for education could be reviewed to ensure they are consistent with the outlook of the reports. Given the time that has passed since their publication, consideration should be given to the need for an update.*

9. A framework for understanding a field of statistics is a conceptual tool or map which outlines a way of thinking about a field so that one is able to organize the concepts, make decisions about gaps and overlaps in data, and undertake analysis with a view of the entire field. A complete framework makes clear the context of existing and proposed work.

10. Although the elements of an international conceptual framework — such as “context, input, process, output, and outcomes”; and the OECD framework for data collection — are in general use, there is no generally accepted international framework.

11. *Given its importance for understanding a statistical programme, a conceptual framework for international education statistics would be useful. A country such as Australia, that already has a comprehensive framework, might lead this work.*

12. International goals can be found in documents published by both the United Nations and OECD. The United Nations goals are found in the Millennium Development Goals and EFA.

Millennium Development Goals

13. At the United Nations Millennium Summit in 2000, world leaders agreed to eight goals to be achieved by 2015. To monitor progress, each goal has targets and each target has indicators that are now central to the strategies of many international development agencies. Goal 2 deals directly with education; Goals 3 and 6 have targets or indicators that deal directly with education.

14. Goal 2 is to “Achieve universal primary education” and targets that “children everywhere ... will be able to complete a full course of primary schooling”. The indicators are the net enrolment ratio in primary education; the proportion of pupils starting grade 1 who reach grade 5; and the literacy rate of 15 to 24 year-olds.

15. Goal 3 is to “Promote gender equality and empower women” and targets the elimination of “gender disparity in primary and secondary education ... to all levels of education”. The indicators include the ratio of girls to boys in primary, secondary and tertiary education; and the ratio of literate women to men, 15 to 24 years old.

16. Goal 6 is to “Combat HIV/AIDS, malaria and other diseases”. One indicator is the “ratio of school attendance of orphans to school attendance of non-orphans aged 10 to 14”.

Education for All

17. The World Declaration on Education for All¹ states that every child, youth and adult shall be able to benefit from educational opportunities designed to meet their basic learning needs. That vision was adopted in 1990 and reaffirmed in the "The Dakar Framework for Action"² in 2000. The World Declaration and the Framework set six goals for 2015:

- (a) Expand early childhood care and education;
- (b) Provide free and compulsory primary education for all;
- (c) Promote learning and life skills for young people and adults;
- (d) Increase adult literacy by 50 per cent;
- (e) Achieve gender parity by 2005, gender equality by 2015;
- (f) Improve the quality of education.

18. The Framework emphasizes the importance of monitoring performance using "robust and reliable education statistics" (para. 75) and "the fundamental importance of statistics and the need for credible and independent institutions to produce them" (para. 76).

Organization for Economic Cooperation and Development

19. The Education Directorate of OECD is also a major source of reliable and comparable statistical data and has vision and mission statements that emphasize lifelong learning. To shape its work the Directorate has six strategic objectives:

- (a) Promoting lifelong learning and improving its linkages with society and the economy;
- (b) Evaluating and improving outcomes of education;
- (c) Promoting quality teaching;
- (d) Rethinking tertiary education in a global economy;
- (e) Building social cohesion through education;
- (f) Building new futures for education.

20. There are concerns with these goals, even though there is virtually universal appreciation of the high profile of the Millennium Development Goals and EFA goals and the political commitment and mobilization of resources needed to produce the associated indicators and improve statistical capacity.

21. There is the practical matter of the target date of 2015. By that date, it is realistic to have a good understanding of the systems needed to measure progress and some understanding of the distance still to be covered.

22. More fundamentally, the Millennium Development Goals and EFA goals are not explicitly rooted in a unifying philosophy, and their emphasis on the economic

¹ Adopted by the World Conference on Education for All, held at Jomtien, Thailand, from 5-9 March 1990.

² Adopted by the World Education Forum, held at Dakar, from 26-28 April 2000. Available at www.unesco.org/education/efa.

utility of education and basic education differs from the liberal philosophical views of the commissions sponsored by UNESCO.

23. It may be that some goals need to be revisited. As they are, the Millennium Development Goals emphasize getting into school, and schooling is used as a proxy for what is learned. As important as schooling is, if the policy question is what students have learned then a direct measure of what students know is needed. If policymakers are interested in whether they are meeting targets for learning then an appropriate measure would assess the competencies of the entire population at a certain age, whether or not they are in school.

24. One might also ask whether the Millennium Development Goals and EFA goals reflect the whole of education. They have driven much of the agenda towards basic education at the expense of post-secondary and adult education. They reflect a belief that education serves the economy rather than citizenship and personal development. They omit research which is central to higher education. They differ significantly from the OECD principles to the point that it could be said that the developing and the developed world have separate goals. Millennium Development Goals and EFA deal largely with primary education and literacy. The concern of OECD with high-level skills reflects an interest in improving healthy economies.

25. The difference in goals leads to differences with respect to data. Whereas the developing world is concerned with collecting the data needed to make policy judgements with respect to basic education, the developed world is concerned with statistics dealing with lifelong learning and the knowledge economy.

B. Administrative data collections and survey data

26. Until recently, administrative data have been the main source of data at the elementary, secondary, and post-secondary levels. More recently, surveys have provided data on educational participation and the nature of the school.

27. The two sources have operated in isolation from one another at every stage of the statistical cycle both nationally and internationally. Not surprisingly, the concepts, infrastructures and ways of working that have developed around each type have lead to inertia and biases regarding which type of data is "best". There has been a polarization into the "administrative data collection" and "household survey" camps. One is as likely to encounter a quick, clear, and forceful expression of the reasons why the other source cannot be used as a considered examination of which source might be appropriate and an attempt to reconcile differences.

28. Given the variety of sources, and the differences in purposes, concepts, definitions, and methods, it is not surprising that differences arise, such as the recent concerns over the number of children in school. When there are major differences, the bodies involved need to reconcile their estimates. Is the problem with quality or with the use of different concepts, such as "enrolment" or "attendance"?

29. Agencies also need to recognize that another data source can be used to supplement or confirm its own, and that the strengths of one organization can support another. For example, teams that an agency locates in a particular country or region are likely able to provide insights that can improve another agency's collection and interpretation.

30. *There needs to be a more concerted effort to use both sources. If the major bodies are not able to resolve differences, then a new process may be needed to deal with technical differences. That may involve a new body, perhaps associated with the United Nations Statistics Division, to provide advice.*

C. Multiple surveys

31. Greater coordination among the major household surveys with important education components is desirable. With the exception of DHS and MICS, which share some history and methodology and cooperate in limited ways, any consistency appears largely unplanned since the questions were developed separately by sponsoring bodies for surveys that each has its unique justification. There is no consolidated list of the countries already surveyed and no consolidated schedule showing which countries will be in upcoming surveys.

32. *There could be a greater attempt to bring about consistency, and that effort could involve people who are experts in education. Schedules could be coordinated so that data are collected on a regular basis from the countries where it is most needed. This, however, will not happen without the designation of an explicit coordinating mechanism or organ.*

D. Outcomes surveys

33. Many outcomes surveys have been undertaken in recent years, primarily in developed countries. Since the EFA World Conference in 1990 a new generation of assessments has developed, oriented towards less-developed countries. Like the IEA and OECD assessments, the new assessments described in annex II to the present report provide information that can improve quality and enhance the research and evaluation capacity of national education systems. To the extent that these efforts develop a culture of monitoring and evaluation, they contribute to statistical capacity-building.

34. Depending on your perspective, international comparisons of outcomes may be seen as either powerful tools for improvement or dangerous instruments of change. Statisticians and educators find the surveys to be very worthwhile investments. However, a politician or senior decision maker responsible for the investments needed for such surveys needs to weigh uncertain potential benefits against the certainty that his country will not rank first. It seems only human nature that a low ranking will be acceptable only so many times before a country will withdraw from an international comparison. *The emerging challenge is to provide the benefits that can be gained from international outcomes surveys without the risks likely to follow from the league table publications that result.*

35. The number of outcomes surveys raises concerns with respect to their proliferation, the lack of coordination, the cost and response burden, and the risk of dividing rich and poor nations. The surveys seem to have taken on the proportions of a growth industry. One has the impression that only a few international experts understand the history of the various surveys, the relationships between them, and the justification for carrying out one survey relative to another.

36. Some forces work against cooperation and encourage an increase in the number of surveys. Different perspectives and perhaps competition is built in because IEA represents researchers whereas OECD and UNESCO represent Governments. Furthermore, proliferation may be encouraged by countries that do not have their own national survey in a given area and may believe they are more likely to have an assessment if multiple agencies are involved.

37. Competition can be a good thing since it lets "a thousand flowers bloom". But perhaps there has been enough experience to decide which the stronger options are, or to blend the strengths of the various approaches. As it is, one might conclude that resources are not being used effectively.

38. *IEA and OECD could coordinate outcomes surveys to gain efficiencies and improve service. Funding bodies — countries and international organizations — might ask for greater coordination and tie funding support to cooperation or provide incentives for cooperation.*

39. A concern related to resources is the extent to which national data resulting from international outcomes surveys are used. Some countries analyse their country data extensively and report on performance for region and gender, for example. Other countries rely on the international report with, mainly, just the ranking of countries. Countries may not exploit the data because they do not have the resources, the research skills, or the political will.

E. Leadership, coordination, and division of responsibility

40. The number of organizations with interest in education internationally creates dynamic and creative situations that can also be confusing and wasteful. Organizations talk about collaboration more than they practice it, with the result that there are many coordination issues. In some cases, agencies that claim to be cooperating are doing so at just one stage of the statistical cycle, such as in data collection or training.

41. CCSA is the mechanism for statistical coordination among international agencies. CCSA usually meets biannually to provide a forum for the heads of statistics of international organizations to discuss issues of common concern. CCSA reports to the United Nations Statistical Commission and has addressed topics such as the use of a common international quality assurance framework, and the related issue of metadata exchange.

42. The structure of CCSA limits its ability to coordinate. CCSA is for directors of statistics in international agencies, which excludes those without a director and important agencies that are not international. Not even all agencies that have directors are members. Furthermore, *since CCSA deals with all subjects some other, perhaps subsidiary, structure may be needed that can invest the time needed to coordinate education statistics.*

43. A basic problem of coordination follows from the ways countries assign responsibility for education. Separate ministries may be responsible for different levels of education and for related elements such as finance. Furthermore, whereas interest in primary and secondary education is invariably focused in a ministry, interest in adult education is diverse and spread across several ministries such as agriculture, labour and health. When it comes to collecting and reporting data,

responsibility can rest with a ministry of education or an NSO. This division is reflected in international work.

44. Although responsibility for education rests with UNESCO, other bodies' roles extend to data collection, storage, and dissemination. UNICEF, the World Bank, and others are all involved. Some bilateral aid agencies also maintain extensive data collection programmes.

45. With respect to data collection, there is a divide between the historic concern of UIS with administrative data and other organizations' involvement with survey data. UIS works primarily with education ministries and agencies that deal with surveys work with NSOs.

46. With respect to definitions and classifications, the United Nations Statistical Commission/United Nations Statistical Division defers to UNESCO. With respect to quality, although the Statistical Commission/Statistics Division would seem to be the logical body, IMF has an increasing role. One is left wondering what authority remains with the Statistical Commission/Statistics Division. *Even in the case of fundamental statistical capacity-building work, one might expect the Statistics Division to provide more global support to statistical data collection, analysis, and dissemination.*

47. In OECD, the use of committees to deal with INES has led to impressive results. At the same time, the committees can duplicate one another's efforts and stimulate so much activity that it is a major effort for countries to participate and stay abreast of developments. As well, it can strain even OECD countries' resources to participate in the various surveys, especially when they may want to participate in IEA surveys as well.

48. *Electronic databases and the Web are powerful tools for sharing information that could be used more extensively. IHSN is a useful model that might be adapted to a wider range of activities and players. The search capability of the inventory should make it possible to identify surveys by name, content, and key players.*

49. *The same or a similar mechanism would be useful to exchange information on programmes and activities in statistical capacity-building, whether they involve international agencies and more than one country or are bilateral programmes involving a donor country and the country receiving assistance.*

50. *System-wide thinking and action such as UIS efforts to integrate LAMP with ALL and ALO with PISA is to be encouraged, as is the idea that LAMP might be used as a module of the DHS survey.*

51. Not only do these new surveys reflect some systems thinking, but they also reflect the latest development in measuring literacy. The earliest and simplest estimates used the level of education completed as a proxy for ability to read. Next, surveys ask whether a person is able to read and write. Modern literacy surveys collect assessment (rather than self-declared) data that yield information on a spectrum (rather than dichotomous) of literacy in the population.

F. Response burden — what is “core”?

52. The UOE data collection reduces duplication and the resulting response burden for the countries involved. Nonetheless, volume, frequency, and complexity remain issues that are complicated by definition and process issues.

53. Administrative data on the number of students and graduates, on the number of teachers, and on revenues and expenditures have long been considered “core” information on the operations of an educational system. There is a growing acceptance that outcomes data from surveys of what graduates or the population as a whole knows or is able to do are also “core”. The volume and complexity of annual requests represent a considerable burden on developed as well as developing countries.

54. To add to the burden, countries receive requests that duplicate the UOE collection, either from other organizations or parts of OECD that are not responsible for the UOE collection. Such duplication suggests either that systems are not adequate to ensure they are dealt with before new requests are made, that the existing data holdings are not well known, or that there are problems with access to the data.

55. The outcomes surveys undertaken by OECD and IEA draw resources away from basic administrative data collections. Some countries are unable either to obtain sufficient resources or to target resources so that people and systems are in place to report. Examples would include the lack of proper concordances to international standards, and the lack of information on all of the areas requested by UOE. Some countries’ administrative data collections have been cancelled, gotten years behind, or been allowed to degenerate yet respond easily to household surveys.

56. *While these problems need to be addressed by the countries involved, international agencies could:*

(a) *Temper their requests for data so as to avoid the danger of overwhelming countries’ abilities to respond. UOE might even consider whether an annual survey is necessary;*

(b) *Consider new initiatives carefully, not just whether the data are really needed but whether the same or sufficient data have already been collected or will soon be collected by another organization or in a separate survey;*

(c) *Prepare a comprehensive list of the core variables countries need to be part of major international data collections. Ideally, such a list would indicate the importance of each variable so that countries could concentrate on data collections appropriate to their resources;*

(d) *Periodically review the major data collection instruments with a view to systematizing the information being collected and the way in which it is collected. The review would include the instruments used by UOE, DHS, MICS, LSMS, and CWIQ. The outcome should be a draft standard for consideration by the data collection bodies.*

57. No list of core variables exists. With more attention to what is “core”, countries would have time to catch up on overdue submissions and improve systems for consistent annual reporting. The implementation of ISCED is an example of the challenges. Some countries require significant support from international agencies to fit their programmes into ISCED, and some developed countries have never

prepared correspondence tables that systematically present how, where, and to what extent concepts and categories in one classification may be found in another, or in earlier versions of the same classification.

58. A review of instruments and preparation of a list of core variables need not involve extensive in-person consultations or take too long. It can be done with a review of documentation that can be obtained electronically. The suggestion that importance be attached to variables is similar to the direction taken by ILO, which distinguishes stages of statistical development (basic, secondary and advanced), recommends priority activities for each stage, and identifies "best" and "acceptable" sources in its recent statistical capacity-building materials.

G. Definitions and classifications

59. Fundamental problems include the lack of an accepted definition and classification of universities and with measuring continuing education, as reflected in OECD, UNESCO and Eurostat initiatives. ISCED itself is limited. Developed and developing countries have difficulties mapping their education systems to ISCED, perhaps reflecting ISCED origins as a classification for the developed countries of Europe.

60. A technical difficulty is that even when there is a good fit with ISCED, sometimes neither survey nor administrative sources provide the detail needed for classification. Other challenges are identified in documents prepared for the INES Technical Group and its networks or in appendices of EAG, which notes countries' problems with trying to fit their reality to the definitions and classifications.

61. In spite of these concerns that suggest underlying concepts and thus the data may be questionable, a great deal of energy is devoted to the development or refinement of indicators to make comparisons that have serious policy implications.

H. Process

62. The UOE documentation is a reference point for the international education community. Nonetheless, there are issues with respect to documentation, collection, indicator construction, and verification. The accumulation of sometimes minor points can make important differences in overall statistical reporting and response burden.

63. Either countries or UOE periodically change definitions or procedure that lead to changes in data and indicators. Although publications document changes, these are lost over time so that users are unable to identify the reasons for changes.

64. Changes can lead a country to discover some longstanding omission and create problems in data collection. Changes can have significant resource implications, especially when historical revisions are involved. The collection tools provided and the administration of the requests may also be problematic.

65. Complaints that the UOE data collection is not sufficiently transparent likely arise because countries do not have the algorithms OECD uses to construct indicators. This leads to the sense that OECD may even estimate missing data without making the estimation rules known.

66. Verification is time-consuming since OECD editing routines may have built-in changes that could go unnoticed, especially when there are staff changes or not enough time to review the voluminous annual documentation. OECD requests data from sources other than the centres of expertise for education, which find it difficult to reconcile submissions because they were not aware of the other requests.

67. *Systems for documenting changes and editing rules need to be considered as part of the review discussed earlier. Consideration needs to be given to including editing rules and major changes in reporting software. These changes would help countries with staff training.*

I. Data quality and capacity-building

68. International statistics rely on the ability of countries, state and local bodies to provide statistics on their educational systems and on the learning outcomes of their populations. Collectively, international organizations make significant investments to help countries with fragile statistical systems to develop sustainable capacity.

69. At its most general, statistical capacity-building involves helping countries develop effective statistical systems, including appropriate institutional and legal frameworks; the appropriate core values such as confidentiality and privacy; non-political objectivity; approaches to assessing priorities, whether government or other users; and mechanisms to coordinate the various parts of a statistical system.

70. Statistical capacity-building efforts tend to emphasize producing statistics at the expense of using statistics. However understandable this may be, it would be in the long-term interests of organizations that collect statistics to involve users as well as providers of statistics. This would strengthen the relationship between users and producers, improve the quality and relevance of data, underline the need for the continued support of data collection, and help to create the national demand for data that is essential to develop sustainable statistical supply. In these efforts, it would be advantageous to involve organizations like IIEP that are more accustomed to working with planners.

71. *Organizations that rely on administrative data could work together to develop the skills needed, even across subject areas. Organizations that specialize in surveys could find ways to work together.*

72. Such cooperation may be lacking because bodies that might be expected to go beyond organizational boundaries are either not sufficiently resourced or do not have the mandate. *The aims of PARIS21 need to be fully implemented and backed by appropriate funding.*

73. For the present review, statistical capacity-building involves helping countries to develop and maintain the information needed to manage their educational system. Education management information systems (EMIS) make it possible to provide important services, such as giving graduates a copy of their diploma or former teachers proof of employment.

74. At the simplest level, administrative data provide a count of students in school, preferably by gender, grade level, and age. More complex systems might include information on students' background and store the data electronically by individual so that the history of the student is known and trends can be understood.

75. Some organizations active in statistical capacity-building work primarily with ministries of education. The largest concentration of staff with this responsibility may be in UIS, which has committed a separate section headed by a senior specialist reporting to the Director. Other organizations active in statistical capacity-building work primarily with NSOs.

76. IMF and the World Bank have taken an increasing role in quality and statistical capacity-building. IMF has set standards to ensure that international markets have reliable statistics. Although adherence to those standards is voluntary IMF monitors compliance and is the only international body that undertakes on-site evaluations to ensure compliance. Some observers note that IMF is the only body with the "leverage" needed to bring about adherence to international standards.

77. The World Bank funds statistical development in countries both directly and through other bodies. Countries are encouraged to have national statistical strategies; with one, a country is able to obtain support to develop their statistical systems. The World Bank supported the creation and maintains ongoing support of UIS, especially the development of consultative mechanisms, new survey strategies, and strengthening national education statistics programmes. WEI has been a major such effort since it began in the mid-1990s when the World Bank provided funding to UIS and OECD to help countries develop their statistical systems so that they are able to report comparable statistics. Under WEI, UIS and OECD have worked with 19 countries.

78. UIS uses an evaluation model that begins with the IMF data quality assessment framework (DQAF), specifically its structure for assessing practices and its dimensions and prerequisites of data quality. UIS trains country staff to use DQAF and works with them to prepare a public review of the systems in place at the school, regional and national levels. The identification of weaknesses at each stage of the statistical cycle forms a roadmap for the statistical capacity-building efforts needed. This work is facilitated by the decentralized management model UIS uses: two regional offices in Asia-Pacific, three in Africa, and one in Latin America. Other organizations operate out of a world headquarters and offer training and other support on an ad hoc basis in various parts of the world.

79. The IMF data quality assessment framework may provide a tool to focus coordinated efforts. The use by UIS of the tool to methodically raise issues and prepare assessments that include options and priorities seems to work well. If other agencies were to use the same model then there would be a built-in consistency to the advice being offered. The next step would be for international bodies to work together in dealing with the same agencies in a given country.

80. *It would be useful for UIS to take the lead in documenting overall guidance on education statistics.* In education, the Association for the Development of Education in Africa may have related materials. Justice statistics has a particularly comprehensive model. The guidance would include the variables identified and prioritized, as discussed under "What is core" above (see sect. F), and would recommend whether the appropriate source for each is administrative or survey.

81. A special note on EMIS software is in order since some attempts to develop software appropriate to developing countries have been abandoned and current attempts may be having difficulties. These efforts may have been too much for single agencies, may not have been integrated with the infrastructure capacity of the

countries involved, may have duplicated other attempts, or may have been made obsolete by software changes.

82. In the developed world, such problems have been solved by using software developed and maintained by specialized private companies. Such a solution may apply in the developing world. Even if incentives had to be offered to compensate private companies for working in a small market, these incentives would likely be less costly than the existing approach. Partnered with an international organization that understands the issues facing schools in developing countries, companies would likely be able to adapt one of the emerging systems into an appropriate and robust system that could have wide application.

83. *An international body might ask private sector companies that specialize in EMIS software to partner with the developers of an emerging software solution on software for use in the developing world. Such a company might be from an emerging economy. Responsibility for ongoing maintenance, upgrades, and training might rest with the consortium.*

J. Privacy and confidentiality

84. Administrative data collections and surveys collect significant amounts of personal information that many cultures consider private, given on the understanding that it will be handled in confidence.

85. Many statistical agencies have policies and procedures to maintain confidentiality. Nonetheless, the issues of confidentiality grow more pressing as technology makes it easier to collect, store, link, and disseminate information. These issues grow more complex when data collected in one jurisdiction are being used in another jurisdiction.

86. Various factors make confidentiality a complex issue at the international level. Countries vary in their capacity to undertake analyses, and some countries rely on international bodies to undertake even the national analyses. Cultures vary in the importance they place on privacy and confidentiality, and some may not have the capacity to guarantee minimal levels of confidentiality even when they want to do so. Countries that have the resources and that place a high premium on confidentiality may not share a common standard of legal and procedural systems to ensure confidentiality.

87. The practices of international and bilateral aid agencies also raise issues. Microdata might be held either by the international or bilateral agency responsible for the survey or by the country where the data were collected. The former reduces burden on the country and facilitates research and report writing that involve international comparisons. The latter means that authors of international reports depend on the ability and willingness of the country to do analyses. After the report is written, international bodies and researchers have access to microdata files only if the country or agency makes available such files and they are consistent with other countries' files.

88. If the microdata are held by an international or bilateral aid agency, then the international community needs to address various questions: *should an international authority oversee the way in which data are handled, perhaps including agreements to deal with confidentiality?*

K. Dissemination: accessing and using data

89. Traditionally, education statistics have been detailed tabulations and databases with limited audiences. Enormous changes in the sophistication and use of hardware and software, however, have meant that books of statistical tables are being replaced by data on the Web. Coupled with the increasing interest in data and indicators, statistical agencies now have an opportunity to make data more accessible, to organize data differently, and to make it possible for users to select their own trends and comparisons for study.

90. Multiple international, regional, and national agencies have or are in the process of developing and maintaining their own databases of international education data, although they draw heavily on the same sources, including core data in the UOE collection. *Given the development and maintenance costs, cooperation is desirable to share scarce resources and facilitate access.*

91. It would be helpful for agencies to provide better information on the origins of that data. Even sophisticated users can find it difficult to navigate the sources and to understand the sometimes dramatic differences in results reported by various agencies. *International agencies could provide a "map" that diagrams the way data move from various sources into the major international databases.* This may be a very appropriate role for either the United Nations Statistics Division or UIS.

92. To be used effectively, data need to be analysed and disseminated systematically. Surveys differ in their emphases. Whereas some surveys result in country reports, perhaps limited to single themes, others result in comparative analyses. *More analytical work is needed to take advantage of the databases from all the surveys. Provided that the confidentiality and privacy issues can be addressed, electronic access will make better use of data that have been gathered at substantial expense.*

L. New pressures — internationalization, trade and commercialization

93. Mobility in higher education is increasing and widening so that mobility now involves secondary education. The pressures creating these changes, such as the emphasis on the centrality of knowledge in society, the internationalization of the labour market and the need for qualifications to be recognized internationally are likely to increase. Further pressure will result from WTO negotiations on trade in services, and GATS, which already includes distance education and satellite campuses in other countries as well as students and faculty studying and working abroad.

94. Coupled with a growing commercial interest in educational services such as training for industry, and the increasing involvement of providers such as professional organizations, NGOs, and private companies, it is reasonable to expect these pressures to significantly increase mobility even further.

95. Although some data are available on the mobility of students, there are virtually no data on programmes and providers. A special data gap exists on commercial activities, which some observers believe is increasing very significantly at the same time as there is a blurring of lines between public and private involvement in education.

96. The lack of data on private, commercial involvement in education goes beyond international activities. Very little data are available on countries' domestic commercial educational activities.

97. These are areas where a conceptual framework would make clear what data are needed and missing.

III. Conclusions and recommendations

98. International education statistics is such a vast field that the present review must be considered preliminary. While the review suggests the richness and diversity of the information on education and learning, it also points to the lack of shared conceptual foundations and limited cooperation. These fundamental concerns cause unnecessary duplication, response burden, and a lack of clarity of purpose. It is our opinion that international education statistics would benefit the most from developments in those two areas.

99. While numerous other issues and suggestions are made in the body of the present report, the following recommendations have top priority and highest urgency:

(a) To develop a comprehensive conceptual framework for international education statistics. The framework would build on what currently exists in international agencies and national offices and would suit the needs of both developed and developing countries;

(b) The conceptual framework forms the basis from which a core set of indicators could be identified. The core indicators would need to be identified by level of importance and by appropriate source. The framework and list of core indicators would foster cooperation and facilitate capacity-building by setting clear directions on priorities;

(c) The United Nations Statistical Commission creates an international task force with a mandate to develop, within 12 months, the comprehensive conceptual framework for international education statistics.

Annex I

The nature of education statistics

1. Some fundamental concepts are useful in dealing with education statistics.

Learning and education

2. Learning is a much broader concept than education. "Learning" emphasizes what individuals learn, regardless of where they learn it, and concerns what happens within an individual. "Education" emphasizes what others — parents, teachers, employers — do to "educate" an individual.

Lifelong education and lifelong learning

3. When the emphasis is on the education of the young, data collection focuses on a limited age group and, generally, on the activities of institutions that are well recognized and organized. A focus on schools leads to education statistics concerned with inputs or "exposure" to education. With an emphasis on learning that continues through adulthood, then at the very least one needs to consider the educational activities of a far larger number of institutions that extends to employers and non-profit organizations that are not generally thought of as "educational". Lifelong education and the learning that takes place outside of educational institutions lead to greater interest in outcomes and what has been learned.

4. Beginning, perhaps, in the 1970s many societies renewed their emphasis on the importance of continuing education past the normal age for leaving school. Increasing technological complexity and the increasing rate of change have accelerated societies' need to make provisions for adults to continue to learn. While "continuing education" directly related to employment and the needs of the economy receives most of the recognition, there remains a longstanding recognition of the importance for adults to pursue learning that is not directly related to their work and that allows them to contribute to the betterment of their lives, their families, and their society.

Context, input, process, output and outcome

5. Educational data and indicators can be categorized as describing "context", "inputs", "processes", "outputs" and "outcomes".
6. Context data include information on the socio-economic setting of a student's family and school. Input data include the number of students and faculty, and the amount of money being spent on an educational system. Process data might look at the way in which a school's money is spent or what goes on in a classroom. Output data concern direct results such as the number of graduates. Outcome data concern longer-term results and the ends to which the educational system may contribute; an example would be graduates' contribution to society.
7. Historically, educational measures have emphasized inputs such as the number of students, the number of faculty, and the amount of money and one major output measure, the number of graduates. More recently, public concern with accountability has led to more interest in process and output measures such as the number of graduates who are literate and who find employment.

Data and indicators

8. The terms "data" and "indicators" are sometimes used interchangeably, even though they deal with different concepts.
9. Indicators are a use of data. The confusion between the two terms arises partly because some data can be used as an indicator in its raw form. Examples would be "enrolment at the primary level" or "expenditure on higher education".
10. Data can also be combined to show, for example, enrolment as a percentage of the school-age population, expenditure as a percentage of gross domestic product, teacher/student ratio, and cost/student. In these cases, the term "indicator" is appropriate.

Administrative and survey data

11. Administrative data are collected to administer a programme. Survey data are collected from individuals (people or corporations) to answer special needs usually associated with a research question.
12. Administrative and survey data are usually the responsibility of different agencies. Administrative data are a monopoly held by the office responsible for administering a programme, such as schools and departments of education. Survey data are generally the responsibility of agencies that specialize in collecting data from individuals or households; these are generally NSOs.
13. **Administrative data collections** — Basic data on students, graduates, teachers or faculty, physical infrastructure, and finance usually come from administrative sources. A school, for example, keeps a record of each student, the grade or programme he is taking, his age and gender, and something about his background. The school also records whether and when the student graduates. By the same token, educational systems are able to report the amount of money they receive and spend, how they spend that money, and about the people they hire.
14. Student, staff, and financial data are fundamental for educational planning in their own right and because they can be combined to calculate indicators — such as cost per student and teacher/student ratios — that are very important to planners and decision makers.
15. Administrative data can be collected using "complete counts" or samples. Either way, they are often collected using "surveys" which might ask, for example, for the number of students by level and gender. Such "aggregate" surveys might be in paper or electronic form. The survey might also be a request to provide certain data in "individual record form"; in this case the agency holding that individual data has a powerful database that allows individual student records to be manipulated to answer complex research and planning questions. Whether data are collected in paper or electronic form, and whether they are collected in aggregate or at the individual level, the present report will refer to this source as "administrative data".
16. **Surveys** — When administrative data are not sufficient, researchers use surveys directed at individuals. Whether the individual being interviewed is found in schools, at work, or at home the survey is often called a "household survey". They are also sometimes called "sample surveys", even though all such surveys involve taking a sample except when the entire population is included and it is called a

"census" or a "census survey". Surveys are commonly used to obtain information on outcomes.

Other data used in education

17. Educational researchers make extensive use of other data such as surveys of population, public finance and health. Population statistics provide the background against which all institutions in society function. Given the total population (of school age, for example) and the total enrolment in an educational system, one can calculate the percentage of the (school age) population being served. Given the number of people employed in major industries and occupations then one can begin to predict the need for graduates with certain skills. Given information on families and the nutrition and health of the population, one can begin to appreciate the difficulties experienced by various populations and to develop school programmes that target problems.

Annex II

Major players and initiatives, their mandates and programmes

1. The present annex provides background on agencies whose general responsibilities influence education statistics. It then outlines agencies that have a long-standing and major presence in international education statistics and initiatives that resulted from the greater demands for reliable data following acceptance of the Millennium Development Goals and EFA. Early work on those goals identified so many issues that an international round table in 2004 resulted in "The Marrakech Action Plan for Statistics"^a and new ideas for helping countries improve their statistical programmes. These initiatives include IHSN, PARIS21, and the encouragement by the World Bank of national statistical strategies. The increased attention also contributed to the work of IMF on dissemination standards and quality frameworks. Regional networks that undertake surveys of educational outcomes are also identified.

United Nations Statistical Commission

2. The United Nations Statistical Commission, supported by the United Nations Statistics Division, has pivotal roles. It published "Fundamental Principles of Official Statistics"^b to assist in the creation of national statistical institutes; the "Declaration of Good Practices in Technical Cooperation in Statistics"^c to guide partners and donors that deliver technical assistance to countries; and "Principles Governing International Statistical Activities"^d to guide the work of international agencies. A fundamental part of the work of the Statistical Commission is to deal with classifications. ISCs require approval by the Statistical Commission or another competent intergovernmental board. In the case of education, UNESCO is the custodian of the classification and endorsed ISCED in 1976. Since then, ISCED has been used to describe student (enrolments and graduates), finance (revenue and expenditure), and personnel (teachers or faculty) data.

Committee for the Coordination of Statistical Activities

3. CCSA is the mechanism for statistical coordination among international agencies. The Committee usually meets bi-annually to provide a forum for the heads of statistics of international organizations to discuss issues of common concern. CCSA reports to the United Nations Statistical Commission and has addressed topics such as the use of a common international quality assurance framework, and the related issue of metadata exchange.

The International Monetary Fund and the World Bank

4. IMF was established to promote international monetary cooperation and exchange stability; to foster economic growth; and to provide temporary assistance

^a Presented to the Second International Round Table on Managing for Development Results, held at Marrakech, Morocco, from 4-5 February 2004. Available at <http://unstats.un.org/unsd/>.

^b Adopted at the special session held from 11-15 April 1994. Available at <http://unstats.un.org>.

^c Endorsed at the thirtieth session held in March 1999.

^d Endorsed by the Committee for the Coordination of Statistical Activities on 15 September 2005. Available at <http://unstats.un.org>.

to help countries with balance of payments adjustments. The Fund's operations have evolved to include work on the quality of data so that international markets will have reliable statistics.

5. IMF has three interrelated standards (SDDS, GDDS, and DQAF) that prescribe fundamental rules of behaviour for statistical offices and provide guidance for the broad development of macroeconomic financial and socio-demographic data. With respect to socio-demographic data — which specifically includes education — IMF collaborates with other international institutions to develop good practices.

6. IMF works with the World Bank — the world's largest external financier of education — to support Governments in the development of their strategies. IMF advises Governments in the areas of its traditional mandate, including promoting prudent macroeconomic policies. The World Bank takes the lead in advising on the social policies involved in poverty reduction.

7. Diagnosing obstacles to reducing poverty and monitoring progress towards that goal requires data and mechanisms to share the information that results. As part of its work, the World Bank funds statistical development in countries.

United Nations Educational, Scientific and Cultural Organization — UNESCO Institute for Statistics

8. UNESCO has various Institutes and Centres that specialize in education, including UIS and IIEP.

9. UIS was created in 1999 to establish current and emerging needs for statistical data and indicators; to improve the collection, dissemination and use of comparative international statistics; and to build statistical capacity in member States. UIS has become the guardian for cross-national data on education.

10. The core of the work of UIS has been annual collection from each country of administrative data dealing with students and graduates, finance, and staff. These surveys provide the database for the calculation of indicators and as the basis for publications. UIS data are used by virtually all international agencies and bilateral agencies.

Organization for Economic Cooperation and Development

11. OECD works on a bilateral basis with 80 non-member countries, although it works on education with fewer than half of that number. The OECD programme includes INES and PISA. Other OECD activities are concerned more with the use of statistics than with obtaining them.

12. Countries that have the statistical capacity and wish to do so "join" INES by paying an annual fee and attending meetings. The commitment is considerable. Presently, INES includes OECD member countries and five non-member countries. For these, INES collects, cleans, and organizes the data that are used in UNESCO, OECD, and Eurostat publications. The findings are published in the annual EAG and the database is available on CD-ROM and the Internet as an interactive online database.

13. Much of the INES work is done by a Technical Group and three country-sponsored networks. The Technical Group is made up of all OECD member countries, Eurostat, UNESCO, and ILO and is primarily concerned with

administrative data on finance, human resources, access, participation, and graduation. The networks use primarily household survey data. Network A is concerned with educational or learner outcomes; Network B with labour market outcomes, school-to-work transitions, and adult learning; and Network C with schools as the learning environment and school processes and organization. PISA grew out of the INES Network A's work and now operates as a separate activity.

United Nations Children's Fund

14. The responsibility of UNICEF for children leads naturally to education. UNICEF is the lead agency for monitoring the child-related Millennium Development Goals, and it is partly that responsibility that has led it to initiate the major survey — MICS — on the condition of children.

International Association for the Evaluation of Educational Achievement

15. IEA is an independent cooperative of research centres created to conduct comparative studies of educational policies and practices. IEA is committed to a cycle of studies in basic school subjects and to additional studies of particular interest to its members, consisting of educational systems in 59 countries. All but six of these are either members of OECD (31) or are identified by the OECD as "non-members" (22).

16. IEA is financed by contributions from the World Bank and fees countries pay to participate in each survey.

United States Agency for International Development and ORC Macro

17. Many countries provide support to developing countries' educational systems. USAID is identified in this report because it undertakes the DHS surveys, which have a major educational component. The surveys are undertaken under contract by ORC Macro, a firm that provides survey research, policy analysis, evaluation, training, and other services.

International Household Survey Network

18. IHSN was launched to foster collaboration to maximize the value of survey information. The Network arose from the recognition that complexity and cost makes it difficult to sustain and maintain the quality of household surveys. IHSN encourages the efficient collection and use of more and better data.

19. IHSN has developed a central Web-based archive, managed and maintained by the World Bank, that provides access to information on major surveys both completed and planned.

PARIS21

20. PARIS21 is a consortium of policymakers, analysts, and statisticians supported by OECD, the World Bank, the European Commission, IMF, and the United Nations. The consortium fosters dialogue among producers and users of development statistics and promotes evidence-based policymaking and monitoring, especially in poor countries. It aims to help develop well-managed and supported statistical systems.

Latin American Educational Quality Assessment Laboratory

21. LAEQAL (also referred to as the Latin American Laboratory for Assessment of the Quality of Education, the Latin American Laboratory for Assessment of Educational Quality, "Laboratorio", and often found under its Spanish acronym of LLECE) was created under UNESCO auspices in 1994 to field a comparative regional assessment of educational outcomes. Comparative studies of third and fourth grade students in language and mathematics have been undertaken.

South African Consortium for Monitoring Educational Quality

22. SACMEQ (also referred to as the South and Eastern African Consortium for Monitoring Educational Quality) is a network created in 1995 primarily to provide joint training related to monitoring and evaluation for staff in 15 ministries of education in southern and eastern Africa. SACMEQ has collected data on student outcomes in reading and mathematics and provided technical support in monitoring and evaluation systems. SACMEQ began when IIEP began working with ministries of education in the region to train educational planners in one nation to study the quality of education. That work was extended to seven ministries to assess reading and literacy, and then to more countries and to mathematics.

Conference of Francophone Ministers of Education

23. The 54 CONFEMEN countries have run the PASEC surveys.

Annex III

Sources of educational data

1. In addition to administrative data, international bodies have access to data from surveys which were created for purposes other than education, which measure education outcomes, and which provide context. This survey data may go to a regional or international body for analysis before it is returned to the country.

UOE

2. UOE jointly collect administrative data on an annual basis to describe school systems and progress through the schools. This collaboration began in 1995 when the three separate data collections were merged, partly to standardize data requirements, definitions and methodologies. In theory, OECD and the European Union survey and process data from their member countries while the UIS surveys and processes data for the remaining countries that are members of UNESCO.

3. Although the three organizations differ in the subject matter covered and definitions, a common core of data requirements and ISCED coding make it possible for UIS to compile standard tables for international reports. The data collected by OECD goes into the INES database and appears in print as *Education at a Glance*.

Surveys with important educational components

4. These surveys arose from research questions that used education as explanatory variables rather than as the focus of attention. DHS started with a fertility survey; MICS arose from child health; LSMS from economic/poverty issues; and CWIQ was developed to monitor social indicators in Africa.

5. Educational data from these surveys can support traditional administrative sources. Uniquely, the household data these surveys collect and store along with education data provide a context for policy and programme planning. Further, the surveys have been repeated often enough that trends can be found. The surveys use a modular design so that they can be adjusted to the needs of particular countries and are undertaken at the request of particular countries. DHS has been undertaken since 1973, primarily in countries receiving USAID support. UNICEF began MICS in 1994 to help developing countries monitor the situation of children. USAID and UNICEF cooperate on funding, questionnaire construction, timing, and data collection. DHS and MICS have surveyed or are in the process of surveying 83 and 54 countries, respectively.

6. LSMS was developed by the World Bank, and since 1985 more than 60 surveys have been undertaken in 43 countries.

7. CWIQ was developed by the World Bank, UNDP, UNICEF and ILO to monitor social indicators in Africa.

Outcomes surveys

8. Surveys of educational outcomes have been undertaken through IEA, OECD, ETS, Statistics Canada, UNESCO, UIS, and regional associations.

9. All such surveys directly assess individual's skills and/or knowledge, mostly in reading, writing, or numeracy, and have different target populations and countries. Some surveys assess mastery of the school curricula while others assess the knowledge and skills needed to manage in life. The assessments have begun to collect background data on students and context data to study factors related to achievement.
10. In 1959-1960 IEA conducted a feasibility study that led to studies of mathematics, science, reading, and composition. In 1971 the methods were refined in the six-subject survey. These two studies led to much of the IEA work that followed.
11. IEA began the Trends in International Mathematics and Science Study (TIMSS) as the First and Second International Mathematics Study (FIMS in 1964 and SIMS in 1982) and the Second International Science Study (SISS in 1982). TIMSS is now conducted on a four-year cycle.
12. In 1984 IEA undertook the international study of achievement in written composition to examine associated variables, especially cultural background, curriculum, and teaching practices. The study included students near the ends of primary schooling, compulsory schooling, and academic secondary school.
13. In 1990 IEA undertook the Reading Literacy Study that refined the definition and assessment instruments. That work led to the Progress in International Reading Literacy Study (PIRLS), intended to operate on a five-year cycle that began in 2001. PIRLS complements TIMSS and the OECD's PISA.
14. In 1999, IEA undertook the Language Education Study, although funding difficulties meant that only Phase 1 was completed.
15. In 2000, OECD developed PISA to assess reading, mathematics, and science on a three-year cycle. Every cycle is to provide a more detailed look at one of reading literacy, mathematical literacy, and scientific literacy.
16. Studies have gone beyond reading, writing, mathematics, and science. In 1999, IEA undertook the Civic Education Study (CivEd), which led to the International Civic and Citizenship Education Study (ICCES) in 2006. These studies provided comparative data on ninth-graders' knowledge of national identity, international relations, and social cohesiveness and diversity. In 1989 IEA began a study of information technology/computer in education (COMPED), which led to the Second Information Technology in Education Study (SITES) in 2004.
17. In 1988 ETS began the International Assessment of Educational Progress (IAEP) to assess achievement in mathematics, science, and geography.
18. A series of surveys undertaken by partnerships involving Statistics Canada, UNESCO, NCES, ETS, and OECD have set out to measure the skills adults need to succeed. ALL, undertaken in 2003, built on the International Adult Literacy Survey (IALS), begun in 1994, and the Second International Adult Literacy Survey (SIALS), conducted in 1997.
19. The newest generation of adult literacy surveys is being piloted by UIS as LAMP, which has been designed to enable comparisons with countries that use IALS and ALL instruments. As well, a "LAMP Lite" is planned for countries with

very low levels of educational attainment and fewer resources. The hope is that this can be used as a module in the DHS surveys.

20. At the same time, OECD is proposing the Programme for the International Assessment of Adult Competencies (PIAAC) for implementation between 2008 and 2010. PIAAC would include elements of IALS and ALL, enlarge the coverage of countries, and would be repeated on a five-year cycle. Actual content is still under discussion, although it seems there is agreement on the policy issues to be covered.

21. In 1992, as a follow-up to the EFA conference UNESCO and UNICEF started the Monitoring Learning Achievement survey (MLA). Following a recent assessment, discussions are leading to a decision to replace MLA with ALO, being developed by UIS. ALO will be to those under 15 years of age what LAMP is to those 15 years of age and older. As conceived, ALO will be structured so that it can be linked to LAMP to make comparisons across age levels and to PISA to make comparisons with countries using that assessment.

22. Regional associations have also initiated surveys of educational outcomes. In 2005 LAEQAL fielded the Second International Comparative Study of Language and Mathematics (SERCE), following the first such study in 1997. Starting in the early 1990s CONFEMEN countries began the PASEC surveys.

Context surveys

23. Some surveys undertaken by international organizations provide a context. In 1980 IEA began the Classroom Environment Study, a longitudinal attempt to identify teaching behaviours associated with student achievement in mathematics, science, and history. In 2001, OECD undertook the International Survey of Schools at the Upper Secondary Level (ISUSS) to examine issues such as school management and finance, teacher recruitment, student admission, and the use of information and communication technologies.

24. Two new studies are being proposed. IEA has begun developing a Teacher Education and Development Study-Mathematics (TEDS-M) to examine how teacher preparation policies, programmes, and practices contribute to the teaching of mathematics and science. OECD has proposed a survey of teachers, teaching and learning (TALIS), designed to be linked to PISA. Although they appear to overlap, IEA notes that the "projects complement each other and are very different".

University "League Tables" — a special case

25. There are also attempts to rank university-level institutions or faculties such as business, law, and medicine. Although some dismiss the rankings on the grounds that they are undertaken by or have private sector involvement and more generally on the grounds of statistical quality, the number of such rankings is growing and they are important in the international mobility of students.

26. As well, there may be some models in this work. Doing the rankings with relatively limited resources and using the Web so individuals can construct their own rankings using their own weights may accelerate the demand for such data.

Annex IV

Acronyms

ALL	Adult Literacy and Lifeskills Survey
ALO	Assessment of learning outcomes
CCSA	Committee for the Coordination of Statistical Activities
CONFEMEN	Conférence des ministres de l'éducation ayant le français en partage (Conference of Francophone Ministers of Education)
CWIQ	Core Welfare Indicators Questionnaire
DHS	Demographic and Health Survey
DQAF	Data Quality Assessment Framework
EAG	Education at a Glance
EFA	Education for All
EMIS	Education management information systems
ETS	Educational Testing Service
Eurostat	Statistical Office of the European Communities
GATS	General Agreement on Trade in Services
GDDS	General Data Dissemination System
IEA	International Association for the Evaluation of Educational Achievement
IHSN	International Household Survey Network
IIEP	International Institute for Educational Planning
ILO	International Labour Organization
IMF	International Monetary Fund
INES	International Indicators of Education Systems
ISC	International statistical classification
ISCED	International Standard Classification of Education
LAEQAL	Latin American Educational Quality Assessment Laboratory
LAMP	Literacy Assessment and Monitoring Programme
LSMS	Living Standards Measurement Study
MICS	Multiple Indicator Cluster Survey
NGO	Non-governmental organization

NSO	National statistical office, agency, institute, or centre
OECD	Organization for Economic Cooperation and Development
PARIS21	Partnership in Statistics for Development in the 21st Century
PASEC	Programme for the Analysis of Educational Systems of the CONFEMEN Countries
PISA	Programme for International Student Assessment
SACMEQ	South African Consortium for Monitoring Educational Quality
SDDS	Special Data Dissemination Standards
UIS	UNESCO Institute for Statistics
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UOE	The data collection administered jointly by UIS, OECD and Eurostat
USAID	United States Agency for International Development
WEI	World Education Indicators programme
WTO	World Trade Organization



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Item 3 (b) of the provisional agenda*

Items for discussion and decision

Population and housing censuses

Report of the Secretary-General

Summary

The present report is submitted to the Statistical Commission in accordance with a request of the Commission at its thirty-sixth session. It contains a description of activities undertaken in response to the actions of the Commission at its thirty-sixth session with regard to the implementation of the 2010 World Population and Housing Census Programme and a discussion of the revision of international standards for conducting censuses. The final draft of the *Principles and Recommendations for Population and Housing Censuses, Revision 2*, is before the Commission as a background document for consideration and adoption.

The Commission may wish to discuss the points for action contained in paragraph 18 of the present report.

* E/CN.3/2007/1.



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I. Introduction

1. The Statistical Commission has before it the report of the Secretary-General summarizing the activities of the United Nations Statistics Division in collaboration with the regional commissions, undertaken in response to the decisions taken by the Statistical Commission at its thirty-sixth session¹ in the area of demographic and social statistics. In the process of implementing the 2010 World Population and Housing Census Programme, the Commission requested that the United Nations Statistics Division act as the umbrella organization for setting standards, providing technical expertise and training and setting priorities, as needed. In addition, the Commission requested that the umbrella strategy evolve around regional arrangements to the fullest extent possible. The Commission also requested that the Division proceed with its work on the revision and update of the *Principles and Recommendations for Population and Housing Censuses*.²

II. Activities of the 2010 World Population and Housing Census Programme

2. The 2010 World Programme, as endorsed by the Commission at its thirty-sixth session and adopted by Economic and Social Council resolution 2005/13 of 22 July 2005, had three main goals:

Goal 1

To support activities aimed at ensuring that Member States conduct a population and housing census at least once during the period 2005-2014;

Goal 2

To produce a revised and updated version of the Principles and Recommendations for Population and Housing Censuses, through the expert group;

Goal 3

To encourage Member States to carry out a population and housing census and to disseminate census results as an essential source of information for small area, national, regional and international planning and development.

3. The Division, as secretariat to the Commission and in collaboration with the Economic Commission for Africa, the Economic and Social Commission for Asia and the Pacific, the Economic Commission for Europe, the Economic Commission for Latin America and the Caribbean and the Economic and Social Commission for Western Asia, organized regional and global expert group meetings and workshops; provided technical guidance; and spearheaded the revision and updating of the *Principles and Recommendations for Population and Housing Censuses*. The revisions took cognizance of regional arrangements and flexible frameworks for developing regionally comparable statistics. For example, in June 2006, the Conference of European Statisticians adopted new recommendations for the 2010 regional population and housing censuses.

¹ *Official Records of the Economic and Social Council, 2005, Supplement No. 4 (E/2005/24), chap. IV, para. 12.*

² United Nations publication, Sales No. E.98.XVII.8.

4. The Division is working closely with other international agencies, such as the World Bank and the United Nations Population Fund (UNFPA). As a follow-up to the Marrakech Action Plan for Statistics,³ which identified the 2010 World Population and Housing Census Programme as one of the key areas of action for enhancing sustainable improvements in national and international statistical capacity, the World Bank has provided financial support for the planning and implementation of the World Programme. Collaboration with UNFPA focused on advocacy activities and the provision of technical assistance in census-taking through its country support teams.

5. The United Nations Statistics Division continued the work, as requested by the Statistical Commission, to maintain the 2010 World Programme website and complement it with additional features, such as descriptions of alternative census designs.⁴ In addition, the Division conducted two census implementation workshops in Africa.

III. Review and update of the *Principles and Recommendations for Population and Housing Censuses*

6. The main aim of the present report is to submit the second revised *Principles and Recommendations for Population and Housing Censuses*, for adoption by the Commission. In the revision of the recommendations the broadest possible participation was ensured through the work of the expert group on the 2010 World Population and Housing Census Programme, which established a drafting group, three working groups and several technical sub-groups, as follows:

(a) Drafting group (chaired by Canada): the group reviewed all submissions by the working groups and prepared the final draft of the *Principles and Recommendations for Population and Housing Censuses, Revision 2*;

(b) Working group on standards, frameworks and a core set of outputs (chaired by Australia): the group reviewed topics such as marital status, households, families and living arrangements; employment; education; mortality; human functioning and disability; internal and international migration statistics; housing; and coordination of a core set of census tabulations for international dissemination. The following technical sub-groups were established by the group:

- (i) Technical sub-group on internal and international migration statistics;
- (ii) Technical sub-groups on human functioning and disability;
- (iii) Technical sub-group on a core set of outputs and tabulations for international dissemination;
- (iv) Technical sub-group on housing census topics;

(c) Working group on census planning and management (chaired by Japan): the group paid particular attention to alternative census designs; strategies for integrated data collection and dissemination; quality assurance; outsourcing; and

³ Available at <http://unstats.un.org/unsd/statcom/doc04/marrakech.pdf>.

⁴ Available at <http://unstats.un.org/unsd/demographic/sources/census/alternativeCensusDesigns.htm>.

information technology in censuses. The working group had two technical sub-groups, namely:

- (i) Technical sub-group on integrated data collection and dissemination;
- (ii) Technical sub-group on alternative designs;

(d) Working group on the promotion of censuses: making value visible (chaired by the Philippines): this group focused on the dissemination of census results.

7. To facilitate regular and cost-effective communication, an interactive web-based discussion forum was developed by the United Nations Statistics Division for the members of working groups and technical sub-groups (see <http://unstats.un.org/unsd/globalcensusforum/>), which was complemented by numerous e-mail exchanges.

8. In addition, the Division organized three expert group meetings in August 2005, June 2006 (specifically on housing censuses) and July 2006. All three expert group meetings were held in New York.⁵ Following the suggestions and recommendations made at those meetings the draft of the *Principles and Recommendations for Population and Housing Censuses, Revision 2* was finalized for consideration by the Statistical Commission. The reviewed and updated draft publication has been circulated as a background document and is available at <http://unstats.un.org/unsd/demographic/sources/census/default.aspx>, and will also be uploaded on the Commission website at <http://unstats.un.org/unsd/statcom/sc2007.htm>.

9. The revised *Principles and Recommendations* incorporate several important changes, such as: (a) a revised definition of place of usual residence, (b) a discussion of alternative approaches to conducting a census, (c) a presentation of recommended tabulations, (d) an emphasis on the importance of metadata, (e) a reordering and updating of core topics and (f) a description of a revised classification of housing units. Some of these changes are briefly discussed below.

10. The definition of place of usual residence has been revised to include a time dimension. The draft devotes a section on alternative approaches to population and housing censuses while pointing out that for some of these approaches there is still limited operational experience because they have not yet completed the full cycle required to produce small-area statistics. To facilitate the exchange of information on alternative census approaches, as it becomes available, the United Nations Statistics Division will continue to maintain and update a website detailing various approaches, including country experiences of such different approaches,⁶ throughout the 2010 census round.

11. The draft calls for the dissemination of census data in different formats and levels of sophistication to reach different users. The draft underscores the importance of collecting census data suitable for cross-national comparisons. To achieve this, the document introduces 51 recommended tabulations that all national statistical/census authorities would be requested to generate at the lowest geographical level at least once during the 2010 census round.

⁵ The reports of the expert group meetings are available as background documents.

⁶ Available at <http://unstats.un.org/unsd/demographic/sources/census/alternativeCensusDesigns.htm>.

12. The collection and presentation of metadata is highlighted in the text. The draft stresses their importance and the need to consider them as indispensable elements that can facilitate the accurate interpretation of census results. All the recommended tabulations are accompanied by a request for metadata.

13. In addition to the above-mentioned changes, the second revised *Principles and Recommendations* presents geo-coding in more detail than was previously the case. Within the framework of the 2010 World Population and Housing Census Programme, the United Nations Statistics Division will update the current handbook on the subject.⁷ The document emphasizes the role of quality assurance in managing censuses, which is explained in more detail in the corresponding handbook.⁸

14. The draft publication proposes a number of changes in the ranking of topics to be covered in population and housing censuses. The following topics that were designated as core in the previous revisions are now designated as additional: time worked for economic activity; useful floor space; rental and owner-occupied housing costs; and year or period of construction of the building. New core topics include country of birth (in conjunction with place of birth); year or period of arrival at the current address; date of birth of last child born alive; household deaths in the past 12 months; disability status; main source of drinking water; type of toilet; sewage disposal; fuel used for cooking; and the availability of information and communication technology devices.

15. Housing is extensively covered. A new classification of housing units that amplifies the differences between conventional dwellings and other housing units is introduced. It also presents a more detailed description of institutions as collective living quarters.

IV. Anticipated future activities

16. Following the completion of the review and update of the first revised *Principles and Recommendations for Population and Housing Censuses*, the United Nations Statistics Division will embark on a number of activities as part of the implementation of the 2010 World Population and Housing Census Programme. An integral part of the Programme is the provision of technically sound advice, to countries and areas, that builds upon the existing strengths of national statistical/census offices while considering ways to strengthen overall national statistical capacity in the process of conducting censuses and related national sample surveys. The Programme will also encourage the sharing and exchange of national experiences through international, regional and subregional exchange programmes, workshops and advisory services.

17. A range of activities are planned to support the implementation of the 2010 World Population and Housing Census Programme, among them:

⁷ *Handbook on Geographic Information Systems and Digital Mapping* (United Nations publication, Sales No. E.00.XVII.12).

⁸ *Handbook on Census Management for Population and Housing Censuses* (United Nations publication, Sales No. E.00.XVII.15, Rev.1).

(a) Conducting and supporting regional and subregional workshops on critical areas of census-taking and implementation. One such area is the use of information technology in censuses;

(b) In the area of advisory services the main goal will be to identify common solutions to technical and organizational problems that many countries confront in planning and conducting censuses;

(c) In order to assist countries to successfully and efficiently conduct censuses the Statistics Division will update existing and produce additional census handbooks, to complement the *Principles and Recommendations*;

(d) Recognizing that many international, regional and subnational organizations are stakeholders in the 2010 World Programme, the Statistics Division will continue to develop the communications networks needed to support the Programme. In addition, the Division will further develop a mechanism to monitor countries' ability to provide funding for the census and to make this information available to prospective donors;

(e) The Division will continue to document the experiences of countries related to the 2010 World Programme by collecting materials used by countries and entering them into a database. The information will be made available on the Division's censuses website at <http://unstats.un.org/unsd/demographic/sources/census/default.aspx>.

V. Points for action by the Commission

18. The Commission is requested to:

(a) Review and endorse the second revised *Principles and Recommendations for Population and Housing Censuses*;

(b) Provide guidance for further implementation of the 2010 World Population and Housing Census Programme, taking cognizance of the contents of paragraph 17.

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Items for discussion and decision: disability measurement

Report of the Washington Group on Disability Statistics**Note by the Secretary-General**

In accordance with the request of the Statistical Commission at its thirty-seventh session,¹ the Secretary-General has the honour to transmit to the Commission the report of the Washington Group on Disability Statistics. The report presents the work completed by the Washington Group as well as its workplan for 2007. The Commission is requested to comment on the findings and conclusions of the Washington Group and the proposals for its future work. In particular, the Group is seeking the Commission's approval on its workplan for 2007, included in chapter III of the report.

* E/CN.3/2007/1.

¹ See *Official Records of the Economic and Social Council, 2006, Supplement No. 4 (E/2006/24)*, chap. I.B.



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Report of the Washington Group on Disability Statistics

I. Introduction

1. In June 2001, the International Seminar on Measurement of Disability recommended that principles and standard forms for indicators of disability be developed for use in censuses. There was a broad consensus on the need for population-based measures of disability for country use and for international comparisons. This work was greatly needed because data on disability, especially in developing countries, were scarce and often of poor quality. Furthermore, international comparability was often lacking, even among developed countries. As a result, the Washington Group on Disability Statistics was formed to address that urgent need.

2. The main purpose of the Washington Group is, therefore, the promotion and coordination of international cooperation in the area of health statistics focusing on disability measures suitable for censuses and national surveys. The major objective is to provide basic necessary information on disability that is comparable throughout the world. More specifically, the Group aims to guide the development of a short set or sets of disability measures, suitable for use in censuses, sample-based national surveys or other statistical formats, for the primary purpose of informing policy on equalization of opportunities. A second priority is to recommend one or more extended sets of survey items to measure disability, or guidelines for such items, to be used as components of population surveys or as supplements to specialty surveys. These extended sets of survey items are intended to be related to the short set or sets of disability measures. The World Health Organization (WHO) International Classification of Functioning, Disability and Health has been accepted as the basic framework for the development of the sets. All disability measures recommended by the Group, short or extended, will be accompanied by descriptions of their technical properties and methodological guidance will be given on their implementation and their applicability to all population subgroups. The Washington Group disseminates its work products globally through the World Wide Web (<http://www.cdc.gov/nchs/citygroup.htm>) and scientific publications.

II. Progress report on work completed

A. Meetings and collaborations

3. The Washington Group has held six annual meetings since its inception: (a) from 18 to 20 February 2002 in Washington, D.C.; (b) on 9 and 10 January 2003 in Ottawa; (c) on 19 and 20 February 2004 in Brussels; (d) from 29 September to 1 October 2004 in Bangkok; (e) from 21 to 23 September 2005 in Rio de Janeiro, Brazil; and (f) from 10 to 13 October 2006 in Kampala. Annual meetings are rotated through major geographical regions to facilitate participation. In addition, two regional workshops were held in 2005 to provide technical assistance and training in pretesting the proposed census questions.

4. The Washington Group has sought to foster international collaboration and, in particular, to ensure that the efforts of the Group are broad-based and inclusive of voices from developing countries of every region of the world. Thus, representatives

of national statistical authorities, of organizations representing persons with disabilities and of other international organizations participate in the Group. Since its inception, the national statistical offices in 88 countries have appointed representatives to participate in it. Representatives of 66 countries have attended at least one annual meeting and 35 countries have attended more than one. Representatives of 79 national statistical offices are currently members of the Washington Group, as well as seven international organizations, six organizations that represent persons with disabilities, the Statistics Division of the Secretariat and other United Nations entities (see annex I).

B. Recent activities and major achievements

5. Since 2001, the Washington Group has: (a) developed a short question set, accompanying rationale and test implementation protocols; (b) provided training to countries in conducting its tests and, more generally, in disability data collection methods; (c) conducted standardized Washington Group tests in 15 countries; (d) analysed test results; and (e) endorsed the short question set (with minor revisions; see annex II).

1. Regional workshops

6. The Washington Group held two regional workshops in 2005, in Africa and Latin America, respectively. The workshops were directed primarily towards countries in the region concerned that were interested in including disability questions in their national censuses. The workshops familiarized countries with the Washington Group short questions set on disability, the accompanying rationale and procedures for testing the questions, and helped to build capacity in collection of data on disability in many developing countries. In addition to receiving training in conducting the tests of the Washington Group questions, those countries are working internally to improve their overall approaches to collection of data on disability.

2. Cognitive and field testing of the census questions

7. Protocols for administering tests of the Washington Group questions were developed by the Group and standardized testing was undertaken in 15 countries, including 13 where the testing was funded through a grant from the World Bank. The purpose of the testing was to ensure the validity of the questions and to better understand how they operated in different settings and cultures. The tests, as well as studies in other countries following the Washington Group approach, show an improvement over traditional census questions. Developing countries that had previously reported disability rates of about 1 or 2 per cent found rates between 8 and 15 per cent when using the Washington Group questions. Such rates are much more in line with data from developed countries that use more complex approaches to collection of data on disability.

3. Provision of technical assistance

8. The Washington Group used the World Bank grant to fund countries to conduct the tests and also to employ a consultant from January to June 2006 to provide technical training and to assist national statistics offices engaged in test activities. In-person technical support was provided to two national statistics offices in Africa.

Assistance via phone and electronic mail (e-mail) was provided to countries in Africa and Latin America as well as to India, the Philippines and Viet Nam.

4. Fostering international cooperation

9. The Washington Group has worked with the Statistics Division of the Secretariat, the Economic Commission for Europe, the Economic and Social Commission for Asia and the Pacific (ESCAP), the Economic and Social Commission for Western Asia, the International Labour Organization, WHO, the World Bank, the Budapest Initiative, the Foundation for Scientific and Industrial Research at the Norwegian Institute of Technology (SINTEF), the Inter-American Development Bank, the Organization for Economic Cooperation and Development, the Statistical Office of the European Communities, and others to promote a unified approach to disability measurement. Several World Bank data instruments have been heavily influenced by the work of the Washington Group (in India and Uzbekistan) and SINTEF has been working in Africa to conduct independent tests of the Group's questions. In addition, ESCAP and WHO, in partnership with the Australian Bureau of Statistics, conducted pilot studies on the Washington Group short set of questions and the longer WHO set of questions. The study results were presented and discussed during the fifth and sixth meetings of the Washington Group. The Group has also been informed that the question set has been pretested or added to surveys in at least 11 countries.

5. Endorsement of a set of census questions on disability

10. At the sixth annual meeting of the Washington Group, held in Kampala in October 2006, test results were reported and the short set of questions on disability (see annex II) was endorsed by the representatives of the 23 countries and five international agencies in attendance. Some minor modifications of the wording were suggested, based on pretest results presented at the meeting. The set comprises questions on six core functional domains: seeing, hearing, walking, cognition, self-care and communication. In countries where resources do not permit inclusion of six questions on a census, the first four domains are recommended for inclusion (seeing, hearing, walking and cognition); the Washington Group strongly endorses the use of all six questions, however. The questions were based on the model of disability inherent in the International Classification of Functioning, Disability and Health, with particular emphasis on international comparability.

III. Workplan for 2007

11. At its sixth meeting, the Washington Group agreed on a workplan for 2007. The plan delegates specific responsibilities to working groups that meet throughout the year (via e-mail and telephone conferences). The next steps for the working groups include:

- (a) Work on the short set of questions for censuses, which comprises:
 - (i) Consideration of additional revisions to the short question set and the use of the short set as a screener;
 - (ii) Continuation of analyses of test data, including joint analyses with ESCAP and WHO;

(iii) Publication of test results from the Washington Group, ESCAP and WHO and country tests;

(b) Work on the extended sets of questions for surveys, which includes creation of a position paper outlining the plan and approach (blueprint) for developing the extended set, including the purpose, rationale and justification for the extended set as well as the issue of international comparability. Questions will be developed within the existing domains and new domains will be added to more completely assess equalization of opportunities. For example, a question on the use of mobility devices might be included to expand the domain captured by the question "Do you have difficulty walking or climbing steps?". Questions on psychological functioning might be added, for instance, to capture a domain that is not now directly represented in the short question set;

(c) Work on methodological issues, which entails:

(i) Evaluating proxy data (working group priority);

(ii) Determining how the questions work for specific sub-populations, such as children, and determining the age at which the questions are meaningful by evaluating the test data from children;

(iii) Determining the portability of questions across administrative modes.

12. The seventh meeting of the Washington Group will be held in Dublin from 19 to 21 September 2007. The objectives of the meeting will be to present:

(a) The additional work on the short set:

(i) Newly available results (if any);

(ii) The results of additional analyses by the Washington Group and ESCAP and country test data;

(iii) Any revisions to the original six questions;

(iv) Work on the use of the short set as a screener;

(v) Options for measuring upper body function;

(b) Proposals for an extended set and test results, if available. The Washington Group will collaborate with ESCAP, which has included development of extended sets in its 2007-2008 work programme, to build on the outputs of the current project. The working group will present a position paper, which will include the plan for, purpose of, and approach to developing the extended set specifically to assess equalization of opportunities;

(c) Discuss strategic issues.

IV. Action to be taken by the Commission

13. The Commission may wish:

(a) To express its views on the findings and conclusions of the Washington Group on Disability Statistics (see chapter II above and annex II);

(b) To consider and approve the draft workplan of the Washington Group for 2007, as described in chapter III above.

Annex I

Membership of the Washington Group on Disability Statistics

1. At present the national statistical authorities sending representatives to participate in the Washington Group include those of 79 countries and territories: Albania, Argentina, Armenia, Australia, Austria, Barbados, Belgium, Bermuda, Bolivia, Brazil, Cambodia, Canada, Chile, China, Hong Kong Special Administrative Region of China, Macao Special Administrative Region of China, Colombia, Côte d'Ivoire, Cuba, Czech Republic, Democratic Republic of the Congo, Denmark, Egypt, Finland, France, Gambia, Ghana, Greece, Guatemala, Hungary, India, Iran (Islamic Republic of), Iraq, Ireland, Israel, Italy, Japan, Jordan, Kenya, Latvia, Lebanon, Lesotho, Lithuania, Malawi, Mauritius, Mexico, Micronesia (Federated States of), Mongolia, Netherlands, New Zealand, Norway, Palestine, Panama, Paraguay, Peru, Philippines, Poland, Romania, Saint Lucia, Serbia, Sierra Leone, Slovenia, South Africa, Spain, Sweden, Syrian Arab Republic, Thailand, Tonga, Trinidad and Tobago, Turkey, Uganda, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay, Venezuela (Bolivarian Republic of), Viet Nam, Zambia and Zimbabwe. In the past, the Bahamas, Bulgaria, the Comoros, Costa Rica, the Dominican Republic, Ecuador, Estonia, Nigeria, Slovakia, Tunisia and the Turks and Caicos Islands have also participated.

2. Past and present representatives of international organizations representing persons with disabilities include the African Rehabilitation Institute, the European Disability Forum, the Inter-American Institute on Disability, the International Federation for Hydrocephalus and Spina Bifida and Rehabilitation International. Past and present representatives of national organizations representing persons with disabilities include the Association for Persons with Cerebral Palsy (Mexico), the Coordination Office for the Integration of Disabled Persons (CORDE, Brazil), the Disabled Organization for Legal Affairs and Social Economic Development (United Republic of Tanzania), the National Disability Authority (Ireland), the National Institute on Disability and Rehabilitation Research (United States of America), the National Union of Disabled Persons (Uganda), the Office of the Ombudsman for People with Disabilities (Puerto Rico), the Puerto Rico Council on Developmental Disabilities, and the National Secretariat for Social Integration of the Disabled (SENADIS, Panama).

3. Other international organizations that have previously or currently participated in the Washington Group include the Statistics Division of the Secretariat, the Economic Commission for Europe, the Economic and Social Commission for Asia and the Pacific, the Economic and Social Commission for Western Asia, the International Labour Organization, WHO, the WHO Collaborating Center for the Family of International Classifications, the World Bank, the Inter-American Development Bank, the International Development Project, the Organization for Economic Cooperation and Development, Partnership Health of the European Union, and the Statistical Office of the European Communities.

Annex II**The short question set of the Washington Group on Disability Statistics, its rationale and context****A. The short question set of the Washington Group****Introductory phrase**

The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM.

Core questions

1. Do you have difficulty seeing, even if wearing glasses?
 - a. No — no difficulty
 - b. Yes — some difficulty
 - c. Yes — a lot of difficulty
 - d. Cannot do at all
2. Do you have difficulty hearing, even if using a hearing aid?
 - a. No — no difficulty
 - b. Yes — some difficulty
 - c. Yes — a lot of difficulty
 - d. Cannot do at all
3. Do you have difficulty walking or climbing steps?
 - a. No — no difficulty
 - b. Yes — some difficulty
 - c. Yes — a lot of difficulty
 - d. Cannot do at all
4. Do you have difficulty remembering or concentrating?
 - a. No — no difficulty
 - b. Yes — some difficulty
 - c. Yes — a lot of difficulty
 - d. Cannot do at all

Additional questions:

5. Do you have difficulty (with self-care such as) washing all over or dressing?
 - a. No — no difficulty

- b. Yes — some difficulty
 - c. Yes — a lot of difficulty
 - d. Cannot do at all
6. Because of a physical, mental or emotional health condition, do you have difficulty communicating (for example, understanding others or others understanding you)?
- a. No — no difficulty
 - b. Yes — some difficulty
 - c. Yes — a lot of difficulty
 - d. Cannot do at all

B. Statement of rationale for the short question set

1. "Disability" is an umbrella term that generally refers to the negative aspects of functioning, such as impairments, activity limitations or participation restrictions. While it is important to collect information on all aspects of the disablement process, it is not possible to do so in censuses. However, important information on selected aspects of disability can be obtained from censuses.

2. In their ongoing deliberations, the Washington Group has agreed that measurement of disability is associated with a variety of purposes, which relate to different dimensions of disability or different conceptual components of disability models. A fundamental agreement of the Group was the need for a clear link between the purpose of measurement and the operationalization of indicators of disability. Equalization of opportunities was agreed upon and selected as the purpose for the development of an internationally comparable short set of questions. This purpose was chosen because:

(a) It was relevant (of high importance across countries with respect to policy);

(b) It was feasible (it is possible to collect the proposed information using an internationally comparable short set of questions on censuses or surveys).

3. In order to address that purpose, questions were developed to identify persons who are at greater risk than the general population of experiencing restrictions in performing tasks (such as activities of daily living) or participating in roles (such as working). In particular, the goal was to gather information about limitations in basic activity functioning (i.e. functional activities such as walking, remembering, seeing, hearing). The "at risk" population captured by the short set of questions will include persons with limitations in basic activities who may or may not also experience limitations in more complex activities and/or restrictions in participation depending in some instances on whether or not they use assistive devices, have a supportive environment or have plentiful resources.

4. The questions were designed to provide comparable data cross-nationally for populations living in a great variety of cultures with varying economic resources. The objective was to identify persons with similar types and levels of limitation in

basic activity functioning regardless of nationality or culture. It was not our purpose to identify every person with a disability within every community.

5. The census format requires that a limited number of questions be devoted to any one statistic that needs to be produced. For reasons of simplicity, brevity and comparability, the choice was made to identify limitations in domains of basic activity functioning that are found universally, are most closely associated with social exclusion and occur most frequently. The information that results from the use of these questions is expected:

(a) To represent the majority of but not all persons with limitation in basic activity functioning in any one nation;

(b) To represent the most commonly occurring limitations in basic activity functioning within any country;

(c) To capture persons with similar problems across countries.

6. The proposed questions identify the population with functional limitations that have the potential to limit independent participation in society. The intended use of these data is to compare levels of participation in employment, education and family life for those with disability versus those without disability and to assess whether persons with disability have achieved social inclusion. In addition, the data can be used to monitor prevalence trends for persons with limitations in the specific basic activity domains.

7. The Washington Group recognizes that the short set of questions for censuses may not meet all the needs for disability statistics, nor will it replicate an evaluation of the population across a wider range of disability domains. A more comprehensive evaluation would be possible in other forms of data collection or in administrative data. The population captured by the short set will not represent the total population with limitations, nor will it necessarily represent the "true" population with disability, which would require measuring limitation in all domains and a much more extensive set of questions.

C. Context of the work of the Washington Group

8. The finalization of the short question set will facilitate the inclusion of the questions in the 2010 census round. The questions were developed according to the Fundamental Principles of Official Statistics^a and are consistent with the International Classification of Functioning, Disability and Health. Most importantly, however, the endorsed questions support the draft convention of the rights of persons with disabilities recently finalized by the Ad Hoc Committee on a Comprehensive and Integral International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities at its eighth session.^b The short set addresses equalization of opportunities for persons with disabilities, which is one of the general principles listed in article 3 and the focus of

^a See *Official Records of the Economic and Social Council, 1994, Supplement No. 9 (E/1994/29)*, chap. V, para. 59.

^b A/AC.265/2006/4 and Add.1.

article 5 of the draft convention. It is also particularly relevant to the collection of data for policy purposes outlined in article 31 and will facilitate the monitoring of participation in cultural life, leisure, recreation, work and employment that is called for in articles 27 and 30.



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**Items for discussion and decision: information
and communication technology statistics**

Report of the Partnership on Measuring Information and Communication Technologies for Development: information and communication technology statistics

Note by the Secretary-General

In accordance with a request of the Statistical Commission at its thirty-seventh session,^a the Secretary-General has the honour to transmit the report on information and communication technology (ICT) statistics of the Partnership on Measuring Information and Communication Technologies for Development. The present paper reports on progress made by the Partnership on Measuring Information and Communication Technologies for Development to improve the availability of internationally comparable statistics on ICT and to define a list of core ICT indicators. The Partnership aims to build the capacities of developing and transition economies to collect and process official data and indicators on their information societies. The list of core ICT indicators is a basic reference for the formulation and evaluation of policies on ICT for development.

* E/CN.3/2007/1.

^a See *Official Records of the Economic and Social Council, 2006, Supplement No. 4 (E/2006/24)*, chap. I, sect. B.



Report of the Partnership on Measuring Information and Communication Technologies for Development

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I. Background

1. During the last decades, advancements in the access to and usage of information and communication technologies (ICTs) have been a driving force for changes in business and in society. While ICT diffusion and usage presents an opportunity to developing countries, the digital divide between developed and developing countries persists, posing a new challenge for development.

2. This has been recognized by Target 18 (part of Goal 8) of the Millennium Development Goals, which states: "In cooperation with the private sector, make available the benefits of new technologies, especially information and communications". Measuring ICT for development can support the assessment of progress towards this goal. It can also contribute to measuring the impact of ICT on the achievement of all the Millennium Development Goals.¹

3. In this development context, the first phase of the World Summit of the Information Society (WSIS), held in Geneva in 2003, highlighted the importance of benchmarking and measuring progress towards the information society through internationally comparable statistical indicators.² The second phase, held in Tunis in 2005, recognized that the development of ICT indicators is important for measuring the digital divide, and called upon countries and international organizations to allocate appropriate resources for the provision of ICT statistics, and to develop effective measurement methodologies including basic ICT indicators and an analysis of the state of the information society. In particular, member States called for periodic evaluation, using an agreed methodology, such as described in paragraphs 113 to 120 of the Tunis Agenda for the Information Society,³ and referring to the work of the Partnership on Measuring Information and Communication Technologies for Development.

¹ See International Telecommunication Union, *World Telecommunication/ICT Development Report 2006: Measuring ICT for social and economic development*, chap. 5.

² The World Summit on the Information Society took place in two phases (Geneva, 10-12 December 2003 and Tunis, 15-18 November 2005). The Geneva Plan of Action (WSIS-03/GENEVA/DOC), states:

"E. Follow-up and evaluation

"28. A realistic international performance evaluation and benchmarking (both qualitative and quantitative), through comparable statistical indicators and research results, should be developed to follow up the implementation of the objectives, goals and targets in the Plan of Action, taking into account different national circumstances.

"...

"f) All countries and regions should develop tools so as to provide statistical information on the Information Society, with basic indicators and analysis of its key dimensions. Priority should be given to setting up coherent and internationally comparable indicator systems, taking into account different levels of development."

³ WSIS-05/TUNIS/DOC/6 (Rev.1).

II. Partnership on Measuring Information and Communication Technologies for Development

4. In response to the issues raised by the Millennium Development Goals and the first phase of WSIS, a number of key stakeholders involved in the statistical measurement of the information society joined to form the Partnership on Measuring Information and Communication Technologies for Development, which was officially launched during the eleventh session of the United Nations Conference on Trade and Development (UNCTAD XI), held in São Paulo, Brazil, in June 2004. Current partners are the International Telecommunication Union (ITU), the Organization for Economic Cooperation and Development (OECD), the Statistical Office of the European Communities (Eurostat), the United Nations Conference on Trade and Development (UNCTAD), four regional commissions (Economic Commission for Africa (ECA), Economic Commission for Latin America and the Caribbean (ECLAC), Economic and Social Commission for Asia and the Pacific (ESCAP), and Economic and Social Commission for Western Asia (ESCWA)), the United Nations Educational, Scientific and Cultural Organization Institute for Statistics (UIS) and the World Bank. The United Nations Information and Communication Technologies Task Force (UNICT) was a member of the Partnership until the end of its mandate.

5. The main objectives of the Partnership are: (a) to define and analyse internationally comparable statistical ICT indicators and develop methodologies to collect these indicators; (b) to assist in building the statistical capacity in developing countries; and (c) to set up a global database for hosting data on core ICT indicators. To achieve these objectives, the respective partners have combined human and financial resources and coordinated activities related to the measurement of the information society.

6. Since March 2005, when the Commission considered the previous report of the Partnership on Measuring Information and Communication Technologies for Development (E/CN.3/2005/23), there has been constant progress towards attaining the Partnership's stated objectives. This has been achieved through several events and activities, in which all Partners have collaborated among themselves and with national statistical offices (NSOs) and policymakers to raise awareness, discuss technical issues, and build capacities (see annex I to the present report).

7. Future work of the Partnership will focus on the subjects of its four task groups on capacity-building, database development, and the measurement of ICT in education and in government. In the area of capacity-building, the Partnership has received requests for technical assistance on ICT statistics from 35 developing countries. It has also compiled a roster of experts on ICT statistics and is currently coordinating the delivery of technical assistance among the members of the Partnership.

III. List of core information and communication technology indicators

8. The list of core ICT indicators presented in the present report (see annex II) was the outcome of an intensive consultation process by the Partnership on

Measuring Information and Communication Technologies for Development that involved NSOs worldwide:

- Following the stock-taking exercise carried out by the Partnership in 2004, the United Nations Regional Commissions hosted several regional statistical workshops on ICT measurement (see annex I). At these workshops, NSOs discussed the situation of ICT statistics in the respective regions and their countries, and proposed regional core lists of indicators for monitoring ICT infrastructure and access, access to, and use of, ICT by households and individuals, ICT use by enterprises, and the ICT sector.
 - The regional lists of indicators were presented for information to the United Nations Statistical Commission at its thirty-sixth session in March 2005 (see E/CN.3/2005/23).
 - Based on the regional lists, and feedback received from NSOs, the Partnership on Measuring Information and Communication Technologies for Development consolidated a list of core ICT indicators. The list was circulated to all NSOs for further comments and suggestions. A final list was discussed, and agreed upon, at the WSIS Thematic Meeting on Measuring the Information Society, held in Geneva from 7 to 9 February 2005. The meeting was attended by 270 delegates from 85 United Nations member countries (primarily NSOs), intergovernmental organizations, non-governmental organizations and civil society.
 - The final list of core ICT indicators was officially presented at the second phase of WSIS, held in Tunis in November 2005, during a parallel event on "Measuring the Information Society" organized by the Partnership. The list is contained in annex II to the present report.
 - Since then, the list has been disseminated widely and now serves as a basis for the Partnership's work on measuring ICT.
9. Involving NSOs from both developed and developing countries in all Partnership activities has been of utmost importance to the Partnership since its conception. National statistical offices from developed countries have provided guidance on methodologies and experiences in ICT data collection, analysis and dissemination, primarily through the OECD Working Party on Indicators for the Information Society (WPIIS). National statistical offices from developing countries have voiced their challenges and needs with regards to ICT measurement, making the Partnership a practical forum for exchanging experiences.
10. The list of core ICT indicators is recommended by all member organizations of the Partnership as a basis for the collection of ICT statistics that could be comparable at the international level. The Partnership publication *Core ICT indicators* provides definitions for the indicators and model questions for their collection.
11. The core indicators in the proposed list benefit from being based on internationally agreed standards (especially those developed by the ITU, OECD and Eurostat). It is one of the objectives of the Partnership to consolidate standards at the global level, taking into consideration the demands and special circumstances of developing countries.

12. A number of countries have already integrated the proposed list of core ICT indicators in their existing household and business surveys. Members of the Partnership are providing assistance to this process. In Latin America, for example, 7 of the 19 countries have adopted the list of core indicators on access to and usage of ICT by households and individuals, and 2 more have adopted part of it. Thirteen countries in the region are including the core indicators on access to ICT, in permanent surveys such as household surveys of living conditions or multiple purposes surveys, by posing questions on household equipment. Six Latin American countries have adopted the core indicators on ICT usage by businesses in existent business surveys.

13. In Western Asia, the seventh session of the ESCWA Statistical Committee, meeting in Beirut from 7 to 9 November 2006, recommended that the Commission submit to ESCWA at its twenty-fifth session a resolution that calls for all ESCWA member countries to adopt the list of core ICT indicators and collect the ICT statistics needed to compute these indicators. The third annual Latin American and Caribbean meeting on measuring ICT for development recommended presenting a compendium of practices of ICT measurement methodologies to the fourth meeting of the Statistical Conference of the Americas of ECLAC, together with the recommendation to adopt the core indicators.

14. The core list serves as a basis for international data collection and has been adopted by UNCTAD for its collection of data on ICT use in businesses and the ICT sector and by the ITU for its collection of data on access to and use of ICT by households and individuals. The core list represents a subset of ICT indicators collected by Eurostat and the OECD from their member States.

15. The topics on the availability of ICT devices in households adopted by the United Nations Expert Group Meeting on the 2010 World Programme on Population and Housing Censuses, held in July 2006, for inclusion in the United Nations *Principles and Recommendations for Population and Housing Censuses*, Revision 2, as core topics in housing censuses are based on the list of core ICT indicators.

16. As with all recommendations of indicators, the core list needs to be considered as a reference point which might require modifications in the future. The current list of ICT indicators is not intended to constitute a final list. Rather, the process is continuous, and the list will undergo periodic review. As countries gain experience with the collection of data for the indicators, and as policy needs evolve, indicators may be modified, removed or added. The Partnership's task groups on measuring ICT in education and in government, for example, are expected to contribute to the development of internationally comparable indicators in these areas.

IV. Conclusions

17. Several developing countries already have developed national strategies to measure information society developments and others are in the path to do so. In that context, the Partnership and the proposed list of core ICT indicators have provided valuable guidance. Two years after its adoption at the WSIS Thematic Meeting, the list has become a common reference for NSOs in developing countries.

18. Technical cooperation provided by the Partnership, combined with a commitment of countries to implement the recommended list of core ICT indicators is essential to the improved availability of internationally comparable statistics on ICT for development.

V. Action to be taken by the Commission

19. The Commission is invited to:

(a) Note the progress made by the Partnership on Measuring Information and Communication Technologies for Development to enhance the availability of comparable statistics on ICT;

(b) Endorse the list of core ICT indicators contained in annex II to the present report; and

(c) Encourage countries to use the list of core ICT indicators as a basis when collecting data on ICT and conducting surveys.

Annex I**Summary of main Partnership activities**

<i>Date</i>	<i>Activity</i>
June 2004	Launch of the Partnership on Measuring Information and Communication Technologies for Development at UNCTAD XI in São Paulo, Brazil
June-August 2004	Stock-taking exercise on the status of information society statistics in national statistical offices of developing countries (the Partnership sent a questionnaire that was answered by 86 out of 179 countries). ^a The results of that exercise are contained in the publication <i>Measuring ICT: the global status of ICT indicators</i> , launched in November 2005
October 2004	Joint ITU/ECA Subregional workshop on ICT indicators, Gaborone
October 2004	UN-ESCWA Round table on information society indicators and profiles for Western Asia, Beirut
November 2004	ECLAC Regional Workshop on Information Society Measurement in Latin America and the Caribbean, Santiago
November-December 2004	Asia-Pacific ICT Technical Meeting, Wellington, New Zealand
January-February 2005	WSIS Africa Regional Preparatory Conference on the Evaluation of the Implementation of the Geneva Plan of Action and ICT indicators, Accra
February 2005	WSIS Thematic Meeting on Measuring the Information Society, Geneva
March 2005	Report of the Partnership (see E/CN.3/2005/23) and presentation of the WSIS Thematic Meeting outcome to the Statistical Commission at its thirty-sixth session ^b
June 2005	UN-ESCWA Regional Capacity-building Workshop on Information Society Measurements: Core Indicators, Statistics, and Data Collection, Beirut
August 2005	Asia-Pacific Internet Research Alliance (APIRA) Second International Conference, Seoul
October 2005	ECLAC Second Regional Workshop on Information Society Measurement in Latin America and the Caribbean, Santo Domingo
November 2005	WSIS parallel event on "Measuring the Information Society" in Tunis. The outcome was reported to the Summit Plenary and the WSIS Tunis outcome recognized the work of the Partnership.

Date	Activity
November 2005	Launch at WSIS Tunis of the Partnership publications <i>Core ICT Indicators</i> and <i>Measuring ICT: the global status of ICT indicators</i>
January 2006	Establishment of the Partnership Steering Committee (UNCTAD, ITU, ECLAC)
March 2006	Establishment of the Partnership's four task groups on: (1) capacity-building; (2) database development; (3) measuring ICT in education; and (4) measuring ICT in government
July 2006	Joint UNCTAD-ITU-ESCAP Regional Workshop on Information Society Measurements in Asia-Pacific, Bangkok
June-October 2006	Stock-taking on capacity-building requirements in the area of ICT statistics in developing countries (questionnaire sent by the Partnership)
November 2006	ECLAC-ITU Third Regional Workshop on Information Society Measurement in Latin America and the Caribbean, Panama City
November 2006	ESCWA-UIS Expert Group Meeting on Information and Communications Technology Indicators Adoption and Data Collection, Beirut

^a The coverage of the stock-taking exercise was assessed in terms of population and share of gross domestic product (GDP) for the respondent countries, with the following results. Africa: 19 out of 52 countries, 43 per cent of the population, 29 per cent of GDP; Western Asia: 10 out of 13, 83 per cent of the population, 83 per cent of GDP; Asia-Pacific: 18 out of 44, 51 per cent of the population, 50 per cent of GDP; Latin America and the Caribbean: 20 out of 36, 91 per cent of the population, 95 per cent of GDP; Central Asia and Central and Eastern Europe, 19 out of 24, 89 per cent of the population, 95 per cent of GDP.

^b The outcome of the WSIS Thematic Meeting is available at <http://unstats.un.org/unsd/statcom/doc05/WSIS-ICTMembers.pdf>.

Annex II

List of core information and communication technology indicators^a

Core indicators on information and communication technology infrastructure and access

- A1 Fixed telephone lines per 100 inhabitants
- A2 Mobile cellular subscribers per 100 inhabitants
- A3 Computers per 100 inhabitants
- A4 Internet subscribers per 100 inhabitants
- A5 Broadband Internet subscribers per 100 inhabitants
- A6 International Internet bandwidth per inhabitant
- A7 Percentage of population covered by mobile cellular telephony
- A8 Internet access tariffs (20 hours per month), in US\$, and as a percentage of per capita income
- A9 Mobile cellular tariffs (100 minutes of use per month), in US\$, and as a percentage of per capita income
- A10 Percentage of localities with public Internet access centres (PIACs) by number of inhabitants (rural/urban)
- A11 Radio sets per 100 inhabitants
- A12 Television sets per 100 inhabitants

Core indicators on access to, and use of, information and communication technology by households and individuals

- HH1 Proportion of households with a radio
- HH2 Proportion of households with a television
- HH3 Proportion of households with a fixed line telephone
- HH4 Proportion of households with a mobile cellular telephone
- HH5 Proportion of households with a computer
- HH6 Proportion of individuals who used a computer (from any location) in the last 12 months
- HH7 Proportion of households with Internet access at home

- HH8 Proportion of individuals who used the Internet (from any location) in the last 12 months
- HH9 Location of individual use of the Internet in the last 12 months
- At home
 - At work
 - Place of education
 - At another person's home
 - Community Internet access facility (specific denomination depends on national practices)
 - Commercial Internet access facility (specific denomination depends on national practices)
 - Others
- HH10 Internet activities undertaken by individuals in the last 12 months:
- Getting information
 - About goods or services
 - Related to health or health services
 - From government organizations/public authorities via websites or e-mail
 - Other information or general Web browsing
 - Communicating
 - Purchasing or ordering goods or services
 - Internet banking
 - Formal education or training activities
 - Dealing with government organizations/public authorities
 - Leisure activities
 - Playing/downloading video or computer games
 - Downloading movies, music or software
 - Reading/downloading electronic books, newspapers or magazines
 - Other leisure activities
- HH11 Proportion of individuals with use of a mobile telephone
- HH12 Proportion of households with access to the Internet by type of access
- Categories allow an aggregation to narrowband and broadband, where broadband excludes slower speed technologies, such as dial-up

modem, ISDN (Integrated Services Digital Network) and most 2G (second generation) mobile phone access. Broadband will usually have an advertised download speed of at least 256 kilobits per second.

HH13 Frequency of individual access to the Internet in the last 12 months (from any location)

- At least once a day
- At least once a week but not every day
- At least once a month but not every week
- Less than once a month

Reference indicator

HHR1^b Proportion of households with electricity

Core indicators on use of information and communication technology by businesses

- B1 Proportion of businesses using computers
- B2 Proportion of employees using computers
- B3 Proportion of businesses using the Internet
- B4 Proportion of employees using the Internet
- B5 Proportion of businesses with a Web presence
- B6 Proportion of businesses with an intranet
- B7 Proportion of businesses receiving orders over the Internet
- B8 Proportion of businesses placing orders over the Internet
- B9 Proportion of businesses using the Internet by type of access
- Categories allow an aggregation to narrowband and broadband, where broadband excludes slower speed technologies, such as dial-up modem, ISDN and most 2G mobile phone access. Broadband will usually have an advertised download speed of at least 256 kilobits per second.
- B10 Proportion of businesses with a local area network (LAN)
- B11 Proportion of businesses with an extranet

- B12** **Proportion of businesses using the Internet by type of activity**
- Sending and receiving e-mail
 - Getting information
 - o About goods or services
 - o From government organizations/public authorities via websites or e-mail
 - o Other information searches or research activities
 - Performing Internet banking or accessing other financial services
 - Dealing with government organizations/public authorities
 - Providing customer services
 - Delivering products online

Core indicators on the information and communication technology sector and trade in information and communication technology goods

- ICT1** **Proportion of total business sector workforce involved in the ICT sector**
- ICT2** **Value added in the ICT sector (as a percentage of total business sector value added)**
- ICT3** **ICT goods imports as a percentage of total imports**
- ICT4** **ICT goods exports as a percentage of total exports**

Notes

^a See Partnership publication *Core ICT Indicators* (2005), available in English, French and Spanish at <http://measuring-ict.unctad.org>.

^b Since electricity is not specifically an ICT commodity, but an important prerequisite for using ICT, it is not included in the core list, but included as a reference indicator.